

# GRADUATE PROGRAMS

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# THE UNIVERSITY OF SOUTHERN MISSISSIPPI BULLETIN



# GRADUATE PROGRAMS 1994-1995

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# CALENDAR FOR SUMMER SESSION, 1994 Hattiesburg Campus

March 21-25 Advisement for telephone registration March 28-April 4 Telephone registration for continuing students May 20-25 Telephone registration and add/drop for continuing and reapplying students Application deadline for new students Friday, May 6 Wednesday, May 25 Last day to pay fees without cancellation of registration Friday, May 27 Final registration for new and reapplying students Sunday, May 29 Residence halls open Monday, May 30 Classes begin Late registration and add/drop begin Last day to register for first three-week term classes Last day to register for first half-term (S) classes Tuesday, May 31 Friday, June 3 Last day to register for full-term classes Saturday, June 4 First term (S) classes meet this week only on MWF schedule Tuesday, June 7 Last day to drop first three-week term classes without academic Friday, June 10 Last day to drop first-term (S) classes without academic penalty End of and final examinations for first three-week term Friday, June 17 Second three-week and six-week term classes begin Monday, June 20 Last day to register for second three-week term and six-week term classes Friday, June 24 Last day to drop full-term classes without academic penalty Tuesday, June 28 Mid-point in Summer Semester End of and final examinations for first-term (S) classes

End of and final examinations for first-term (S) classes
Last day to file application for undergraduate and graduate
degrees for Fall, 1994 Commencement
Last day to drop second three-week term classes without
academic penalty

Wednesday, June 29
Second-term (SS) classes begin
Last day to register for second-term (SS) classes
Monday, July 4
Independence Day Holiday
Monday night classes meet

Wednesday, July 6
Last day to drop six-week term classes without academic penalty
Friday, July 8
End of and final examinations for second three- week term
classes

Monday, July 11 Third three-week term classes begin

Last day to register for third three-week term classes

Wednesday, July 13 Last day to drop second-term (SS) classes without academic

rednesday, July 13 Last day to drop second-term (55) classes without academic penalty

Tuesday, July 19

Last day to drop third three-week term classes without academic penalty

Friday, July 29

Last day of regularly scheduled classes

End of second-term (SS) classes
End of and final examinations for third three-week term classes

End of and final examinations for six-week term classes

Monday-Friday

August 1-5

Examinations for full-term and second-term (SS) classes

Friday, August 5 Commencement, Green Coliseum

Saturday, August 6 Residence halls close

# CALENDAR FOR FALL SEMESTER, 1994 Hattiesburg Campus

March 21-25 Advisement for telephone registration
April 5-24 Telephone registration for continuing students

July 1-22 Telephone registration and add/drop for continuing and

reapplying students

Friday, August 5 Application deadline for new students

Wednesday, August 17

Last day to pay fees without cancellation of registration Friday, August 19

Last day to pay fees without cancellation of registration for new and reapplying students

Sunday, August 21 Residence halls open

Monday, August 22 Classes begin

Late registration and add/drop begin
Last day to register for first-term (S) classes
Last day to register for full-term classes

Monday, September 5 Labor Day Holiday

Monday day and night classes will not meet

Monday, September 12 Last day to drop first-term (S) classes without academic penalty

Monday, October 3 Last day to drop full-term classes without academic penalty

Thursday, October 13 Last day of first-term (S) classes Friday, October 14 Mid-point in Fall Semester

> Final examinations for first term (S) classes Registration for second-term (SS) classes

Second-term (SS) classes begin
Tuesday, October 18 Last day to register for second-term (SS) classes

Friday, October 21 Last day to file application for undergraduate and graduate

degrees for Spring, 1995 Commencement

Friday, November 4 Last day to drop second-term (SS) classes without academic

penalty

Wednesday, November 23

Tuesday, August 23

Monday, October 17

Friday, August 26

6:00 PM

Thanksgiving Holidays begin Night classes do not meet

Monday, November 28

Tuesday, December 6 Friday, December 9 Classes resume Tuesday night class examinations

Last day of second-term (SS) classes Last day of regularly scheduled classes

Monday - Friday December 12-16

December 12-16 Examinations (including Monday, Wednesday, and Thursday night and second-term classes)

Friday, December 16 Commencement, Green Coliseum

Saturday, December 17 Residence halls close

# CALENDAR FOR SPRING SEMESTER, 1995 Hattiesburg Campus

October 17-21, 1994 October 24-November 6

January 2-5, 1995

Friday, December 9, 1994 Thursday, January 5, 1995 Friday, January 6 Sunday, January 8 Monday, January 9

Tuesday, January 10 Friday, January 13 Monday, January 16

Monday, January 30 Monday, February 20 Tuesday, February 28

Friday, March 3

Monday, March 6

Tuesday, March 7 Monday-Friday March 13-17

Monday, March 20 Friday, March 24

Thursday, March 30 Friday, April 14

Wednesday, May 3 6:30 PM Thursday, May 4

Thursday, May 4 6:30 PM Friday, May 5

Monday-Friday May 8-12 Monday, May 8

6:30 PM Tuesday, May 9 6:30 PM

Friday, May 12 Saturday, May 13 Advisement for telephone registration
Telephone registration for continuing students

Telephone registration and add/drop for continuing and reapplying students

Application deadline for new students

Last day to pay fees without cancellation of registration Final registration for new and reapplying students

Residence halls open Classes begin

Late registration and add/drop begin

Last day to register for first-term (S) classes Last day to register for full-term classes Martin Luther King Jr.'s Birthday (Observed) Monday day and night classes will not meet

Last day to drop first-term (S) classes without academic penalty Last day to drop full-term classes without academic penalty

Mardi Gras Holiday

Tuesday day and night classes will not meet

Mid-point in Spring Semester

Last day of and final examinations for first-term (S) classes

Registration for second-term (SS) classes Second-term (SS) classes begin

Last day to register for second-term (SS) classes

Spring Holidays Classes resume

Last day to drop second-term (SS) classes without academic

penalty

Last day to file application for undergraduate and graduate degrees for Summer, 1995 Commencement

USM Day Good Friday Holiday

Wednesday night class examinations Last day of second-term (SS) classes Thursday night class examinations Last day of regularly scheduled classes

Final examinations for second-term (SS) classes

Examinations (day classes)

Monday night class examinations

Tuesday night class examinations Commencement, Green Coliseum

Residence halls close

# CALENDAR FOR SUMMER SESSION, 1995 **Hattiesburg Campus**

Advisement for telephone registration

March 27-April 2 Telephone registration for continuing students Telephone registration and add/drop for continuing and May 19-24 reapplying students Friday, May 5 Application deadline for new students Wednesday, May 24 Last day to pay fees without cancellation of registration Friday, May 26 Final registration for new and reapplying students Sunday, May 28 Residence halls open Monday, May 29 Classes begin Late registration and add/drop begin Last day to register for first three-week term classes Tuesday, May 30 Last day to register for first half-term (S) classes Friday, June 2 Last day to register for full-term classes Tuesday, June 6 Last day to drop first three-week term classes without academic penalty Friday, June 9 Last day to drop first-term (S) classes without academic penalty Friday, June 16 End of and final examinations for first three-week term Monday, June 19 Second three-week and six-week term classes begin Last day to register for second three-week term and six-week term classes Friday, June 23 Last day to drop full-term classes without academic penalty Wednesday, June 28 Mid-point in Summer Semester End of and final examinations for first-term (S) classes Last day to drop second three-week term classes without academic penalty

Second-term (SS) classes begin Thursday, June 29 Friday, June 30

Last day to register for second-term (SS) classes Second-term (SS) classes meet on MWF schedule this week only

Tuesday, July 4 Independence Day Holiday

Tuesday night classes meet

Wednesday, July 5 Last day to drop six-week term classes without academic penalty End of and final examinations for second three-week term Friday, July 7

classes

Monday, July 10 Third three-week term classes begin

Last day to register for third three-week term classes

Wednesday, July 12 Last day to drop second-term (SS) classes without academic penalty

Tuesday, July 18 Last day to drop third three-week term classes without academic penalty

Friday, July 21 Last day to file application for undergraduate and graduate

degrees for Fall, 1995 Commencement

Last day of regularly scheduled classes Friday, July 28

End of second-term (SS) classes

End of and final examinations for third three-week term classes End of and final examinations for six-week term classes

Monday-Friday

Saturday, July 1

March 20-24

July 31-August 4 Examinations for full-term and second-term (SS) classes

(including night classes)

Commencement, Green Coliseum Friday, August 4

Saturday, August 5 Residence halls close

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DAVID BOUNDS, B.S., M.Ed.	Assistant Athletic Director
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SAM H. HALL, B.S	Men's and Women's Golf Coach
CARRIE BYRD, M.S.	Volleyball Coach
HILL H. DENSON, JR., B.S., M.S	Head Baseball Coach
HELEN C. GRANT, B.S., M.Ed	Compliance Officer and Women's Administrator
JEFFREY J. BOWER, B.S., M.B.A	Head Football Coach
TEDDY VIATOR, B.S	Men's and Women's Tennis Coach
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	Strength Coach
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#### PURPOSE STATEMENT

The University of Southern Mississippi recognizes the interdependence of teaching, research, and service. It is therefore dedicated to the pursuit of excellence in each of these areas, as well as their support operations, with the goal of achieving and maintaining the highest possible quality throughout the University.

The University of Southern Mississippi is committed to quality education. In its undergraduate programs, and in graduate and professional programs that aim for national distinction, it seeks to educate students who will be well-trained in their chosen profession, whose critical thinking skills and respect for learning will foster life-long learning, and who recognize their obligation to contribute to their society—whether local, national, or international.

This education will be provided by a community of scholars who are dedicated to high standards of original inquiry and creative expression, and to the principles of intellectual freedom. The University affirms its support for sound research, scholarship, and creative activity, which will expand the boundaries of human knowledge, inspire superior teaching, and in their applications improve the quality of life of the citizens of Mississippi and the world.

With the understanding that teaching and research must complement service to society, The University of Southern Mississippi pledges to pursue its goals in an educational atmosphere that affirms a commitment to the preservation of our planet's environment and a recognition of the increasing importance of international understanding. It teaches respect for diversity of ideas, beliefs, and cultures, as well as for its constituents' own cultural heritage. It seeks to attract and nurture a faculty, staff, and student body that reflects this diversity, while working always to enhance life locally and regionally. In short, The University of Southern Mississippi strives for excellence.

The University of Southern Mississippi values quality teaching and intellectual achievement, research and creative expression, personal development, quality programs and services, and the maximum use of resources. These values are supported by the following goals:

- Commitment to quality teaching and intellectual achievement by encouraging learning based in
  rational inquiry, problem solving, challenge, creativity, and intellectual initiative; developing an
  appreciation of culture and the liberal arts; attracting and retaining a highly qualified and diverse
  faculty, staff, and student body; and creating an appreciation for diversity.
- Commitment to research and creative expression by preserving and refining existing bodies
  of knowledge and expanding and communicating new knowledge.
- Commitment to personal development by creating a supportive environment characterized
  by opportunities for leadership development; enhancing communication skills; developing
  cooperative attitudes in problemsolving through team-work methods; creating an awareness
  of the responsibility of a citizen in a democratic society; promoting healthy lifestyles within
  the University community; encouraging students to become supporting alumni; providing
  opportunities for developing career goals; demonstrating competence and integrity;
  developing an understanding of the complexities of differing cultural values in a global
  environment; and creating an understanding of international problems.
- Commitment to quality programs and services by giving attention to our alumni and other
  constituents; increasing financial support for the University; maintaining efficient student
  services; providing a safe, well-maintained environment; maintaining an athletic program
  that instills pride and generates positive recognition; enhancing University public service to
  the community; and developing practices which protect and preserve our environment.
- Commitment to maximizing resources through technology utilization by continuing to improve the equipment, physical facilities, and library resources of the University; utilizing appropriate technologies to deliver programs more effectively; and advocating the usage of modern technology.

# FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

# (Buckley Amendment)

The Buckley Amendment deals with one subject only: educational records. The purpose of the law is to define, more precisely than ever has been done, who may or may not see them. On the one hand, the law grants students guaranteed access; on the other hand, it takes from the universities the privilege of indiscriminate disclosure.

The Buckley Amendment sets forth these main requirements:

- it allows a student access to each educational record that a university or college keeps on him or her;
- it requires the institution to establish a policy on how students can go about seeing specific records;
- (3) it requires the institution to inform all students as to what rights they have under the Amendment, how they can act on these rights according to school policy, and how they can see a copy of the policy; and
- (4) it requires the institution to seek student permission, in writing, before disclosing any personally identifiable record to individuals other than professional personnel employed in the university or college (and others who meet certain specified requirements).

The University has developed and put into writing a policy for handling requests from students and for disclosing personally identifiable information about students. Students are notified once a year of their rights under the law by publishing the University policy in the student handbook.

# REHABILITATION ACT OF 1973 AND THE AMERICANS WITH DISABILITY ACT

The University of Southern Mississippi complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disability Act. No otherwise qualified handicapped person, solely on the basis of handicap, will be excluded from participation in, be denied the benefits of, or be subjected to discrimination in the administration of any educational program or activity including admission or access thereto or in treatment or employment therein by The University of Southern Mississippi. If you need assistance in reasonably accommodating a disability in the classroom or on campus please contact the Director of Disabled Student Services at 266-5924.

# RETENTION OF STUDENTS AND PROGRAM COMPLETION INFORMATION

The Office of Graduate Admissions will provide, upon request, information regarding student retention as well as the number and percentage of students completing specific graduate programs at The University of Southern Mississippi. For further information, please contact:

Director of Graduate Admission The University of Southern Mississippi Box 10066 Hattiesburg, MS 39406-0066 (601) 266-5137

#### BULLETINS

The University of Southern Mississippi has four publications each year; the Undergraduate Bulletin, the Independent Study Bulletin, and the Regional Campus Bulletin. To get the complete programs of the University, please check each Bulletin.

# THE GRADUATE SCHOOL

Robert T. van Aller, Dean Hattiesburg, MS 39506-5024 (601) 266-4369

The Graduate School at The University of Southern Mississippi was established in 1947 to recognize the University's growing responsibilities as a center of higher learning and provide an academic environment in which advanced research and free inquiry could develop to the advantage of both the student and the State. In the years since 1947, the University's graduate programs have developed logically on the growing points of strong undergraduate schools and departments to meet the needs for professional competence beyond the academic measure of the baccalaureate degree.

In response to the need to offer graduate programs beyond the boundaries of the Hattiesburg Campus, the Board of Trustees of Institutions of Higher Learning in 1972 authorized the University to grant graduate degrees on the campus at The University of Southern Mississippi, Gulf Coast. Course work taken at the Hattiesburg and Gulf Park campuses is considered as campus work.

# The Graduate School's Place Within the University Structure

The Graduate School is administered by a dean executing policies determined by the Graduate Council. The present composition of the Graduate Council includes the Dean of the Graduate School and elected members from the College of The Arts, the College of Business Administration, the College of Education and Psychology, the College of Health and Human Sciences, the College of Liberal Arts, and the College of Science and Technology. Permanent ex officio members are the President of the University and the University Librarian. The Council elects a chair from its regular members. The University Registrar serves as secretary to the Council. The Dean of the Graduate School serves as corresponding secretary.

The responsibilities of the Graduate Council, representing both administration and faculty, include:

- 1. Determining policies of admission to the Graduate School.
- Considering and approving graduate programs submitted to the Council through curriculum committees of each college.
- 3. Electing members of the Graduate Faculty upon recommendation by the academic deans.
- 4. Approving new courses (and deleting courses) for graduate credit.
- 5. Acting upon any other problems affecting graduate programs.

The graduate programs approved by the Council are carried out through the Graduate Faculty in each degree-granting college of the University's academic organization.

# **DEGREE PROGRAMS OFFERED\***

The University of Southern Mississippi offers graduate level programs in nearly every recognized academic discipline. Even those departments not yet ready to offer master's or doctoral degrees are usually equipped to offer a graduate minor. In addition, master's degrees are offered at USM, Gulf Park. For specific information about the master's programs at Gulf Park, please see its section in this **Bulletin**.

The degrees which are offered and their majors are listed below. Refer to each department for emphasis areas.

\*Please note that degree offerings may change due to current program reviews. Those listed in this Bulletin are those granted as of the 1993-1994 academic year. Check with the department for current offerings.

# **DEGREES OFFERED**

# DOCTOR OF EDUCATION

Adult Education Human Performance and Recreation

Curriculum and Instruction Science Education
Educational Administration Special Education

# **DOCTOR OF PHILOSOPHY**

Adult Education History

Biological Sciences Human Performance and Recreation

Chemistry Marine Science

Communication Music

Counseling Psychology
Curriculum and Instruction
English
Polymer Science
Psychology
Science Education
Scientific Computi

Scientific Computing Special Education

### DOCTOR OF MUSIC EDUCATION

Music Education

# **DOCTOR OF MUSICAL ARTS**

Performance and Pedagogy

#### SPECIALIST IN EDUCATION

Education (CPY/EDS) Education (ELR/EDS)
Education (CUI/EDS) Education (SPE/EDS)

#### MASTER OF ART EDUCATION

Art Education

#### MASTER OF ARTS

Anthropology Philosophy
Communication Political Science
Criminal Justice Psychology
English Speech and Hearing

Geography Sciences

History

#### MASTER OF BUSINESS ADMINISTRATION

**Business Administration** 

#### MASTER OF ART IN THE TEACHING OF LANGUAGES

Foreign Languages

### MASTER OF EDUCATION

Adult Education Educational Curriculum and Instruction

Counseling and Personnel Services Special Education

Educational Administration

and Supervision

#### MASTER OF FINE ARTS

Theatre

#### MASTER OF LIBRARY AND INFORMATION SCIENCE

Library and Information Science

### MASTER OF MUSIC

Music

## MASTER OF MUSIC EDUCATION

Music Education

# MASTER OF PROFESSIONAL ACCOUNTANCY

Accounting

#### MASTER OF PUBLIC HEALTH

Public Health

# MASTER OF SCIENCE

Anthropology

**Biological Sciences** 

**Business Technology Education** 

Chemistry

Communication

Computer Science

Counseling Psychology

Criminal Justice

**Economic Development** 

**Educational Curriculum** 

and Instruction

Engineering Technology

English

Family and Consumer Studies

Geography

Geology

History

**Human Nutrition** 

Human Performance

Institution Management

Marine Science

Mathematics

Medical Technology

**Physics** 

Political Science

Polymer Science

Psychology

**Public Relations** 

Recreation

Science Education

Speech and Hearing Sciences

Technical and Occupational Education

#### MASTER OF SCIENCE IN NURSING

Nursing

#### MASTER OF SOCIAL WORK

Social Work

#### UNIVERSITY PRESS OF MISSISSIPPI

The University Press of Mississippi was founded in 1970 to encourage the dissemination of the fruits of research and study through the publication of scholarly works. Functioning as the scholarly publishing arm of the state-supported universities in Mississippi, the University Press is governed by a Board of Directors made up of one representative from each of the eight universities, one representative from the Board of Trustees of State Institutions of Higher Learning, and the Director of the Press.

The University Press publishes about 50 books per year. Primary areas of interest are Mississippi history and literature, but manuscripts in all areas of study are welcomed.

Administrative offices of the University Press are located in the Education and Research Complex, 3825 Ridgewood Road, Jackson, Mississippi.

#### COLLEGE OF INTERNATIONAL AND CONTINUING EDUCATION

An administrative entity under the Vice President for Academic Affairs, the College of International and Continuing Education coordinates all programs bringing international students to The University of Southern Mississippi and all programs sending USM students and those of its consortium members abroad for academic credit through its three international components: the English Language Institute, the Office of International Student Affairs, and the Office of International Programs.

The English Language Institute offers intensive language instruction, courses in conversational English, and specialized courses in Business English, English for Science and Technology, and TOEFL Preparation. International students accepted to the Graduate School of the University, and those planning to apply for admission to the Graduate School, often sharpen their language skills at the English Language Institute. For further information, contact the Director, English Language Institute, USM, Hattiesburg, MS 39406-5065, USA. Tel. (601) 266-4337 FAX (601) 266-5699.

The Office of International Student Affairs coordinates all facets of international admissions and student services. The ISA provides counseling on immigration regulations, personal matters, culture shock and adjustment, as well as some academic counseling in conjunction with the various departments. The Office processes all international applications, evaluates foreign academic credentials and issues the appropriate immigration documents for the non-immigrant foreign student. Multi-cultural programming for the international students and the community is also coordinated by the ISA.

The ISA Office disseminates USM information to foreign schools, U.S. embassies/ consulates abroad, and non-profit international organizations (such as the Institute for International Education).

This Office also provides information to and immigration documents for research scholars invited by various USM departments to participate in limited research opportunities.

For further information, write to:Director

Office of International Student Affairs

College of International and Continuing Education

The University of Southern Mississippi

Box 10047

Hattiesburg, MS 39406-0047

U.S.A.

Tel. (601) 266-4841 FAX (601) 266-5699

Office of International Programs. The Office of International Programs administers a variety of programs providing USM students opportunities to study abroad. Summer-term programs offering regular USM academic credit include:

The British Studies Program, a summer term in London in which USM functions as the academic and logistical linchpin for a ten school consortium comprised of the University of South Alabama, Memphis State University, Georgetown College, Hinds Community College, Midwestern State University, East Texas State University, Auburn University-Montgomery, Northeast Louisiana University and the University of Arkansas-Little Rock.

The Australian Studies Program, a 3500 mile trek

The Austrian Studies Program in Vienna, Austria

The Caribbean Studies Program in Ocho Rios, Jamaica

The French Language Program in Montpellier, France

The Spanish Language Program in Cuernavaca, Mexico

The Japanese Studies Program in Tokyo, Japan

Other academic study abroad programs coordinated by the Office are:

Semester abroad exchanges with the University of Victoria, Canada, and the Ecole Superieure du Commerce Exterieur, Paris, France.

Year abroad exchange programs with the University of Wales, Swansea, and the University of Bonn, Germany.

For further information write to:

College of International and Continuing Education

The University of Southern Mississippi

Box 5151

Hattiesburg, MS 39406-5151

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Tel. (601) 266-4344 FAX (601) 266-5723

#### INTERNATIONAL STUDENTS

The University enrolls graduate students from outside the United States. Assistance in academic and non-academic matters before and during the international student's stay at the University is provided by the Office of International Student Affairs.

English Language Proficiency: Applicants whose native language is other than English must present the results of the Test of English as a Foreign Language (TOEFL). Exceptions may be made if the applicant has earned a degree at an accredited US college or university. TOEFL requirements vary from program to program, ranging from 525 to 580. See Admission Requirements for international students under the department listing for specific TOEFL requirements.

English Instruction: Applicants who meet all admission requirements except English language proficiency can consider enrolling in the USM English Language Institute prior to academic enrollment. The Institutional TOEFL is offered periodically at the ELI for enrolled students. Its scores cannot be sent to other institutions. For information about the English Language Institute, write English Language Institute, Hattiesburg, MS 39406-5065, USA.

Admission Requirements: Appropriate graduate test scores are also required. The minimum GRE is 850, although some departments may require a higher score. Official transcripts with

degrees posted must be submitted for each school attended.

Financial Resources: In order to meet requirements for entry into the United States for study, applicants must demonstrate sufficient financial resources to meet expected costs of their entire educational program. Applicants must provide documentary evidence of their financial resources for university study since USM has no special funds for financial assistance to international students.

#### ADMISSION PROCEDURE:

1. Write to the Office of International Student Affairs, Hattiesburg, MS 39406-0047 USA for information and application forms to the University's graduate programs.

2. Complete the forms properly and return with a \$25.00 application fee to the address above. The application and supporting documents must be received no later than two (2) months prior to the registration date desired.

3. Have all official transcripts and diplomas from all former institutions attended sent to the Office of International Student Affairs. Please note unauthorized photo copies are NOT acceptable.

4. Have all appropriate official test scores sent to the Office of International Student Affairs.

A Certificate of Eligibility for Exchange Visitor Status (Form IAP-66 for a J-1 visa) or a Certificate of Eligibility for Student Status (Form I-20 for an F-1 visa) is issued only to those applicants who have been officially admitted to the University.

# ADMISSION REQUIREMENTS AND PROCEDURES

Since applicants must always be admitted to a specific program within the Graduate School, all applications for admission to the Graduate School are closely reviewed and must be approved by the chair of the department in which the student intends to study, by the college dean, and by the Graduate Dean. Admission forms are procurable from and should be submitted to the Graduate Admissions Office.

The aptitude phase (verbal and quantitative sections) of the **Graduate Record Examinations** (GRE) is required of all applicants to the Graduate School except in Nursing which requires the analytic plus verbal sections of the GRE, in the College of Business Administration, which requires the **Graduate Management Admissions Test** (GMAT), and in some departments of the College of Education and Psychology, which accept the **National Teacher Examinations** (NTE) or the **Miller Analogies Test** (MAT). Prospective students should plan to take the appropriate examination, given several times a year at a number of university testing centers, (or by computer at designated centers given on a weekly basis) early in their senior year and request that a copy of their scores be sent to the Graduate Admissions Office.

The academic record, character, and conditions of application of the applicant must be in accordance with the rules and regulations of the Board of Trustees of State Institutions of Higher Learning and with the laws of the State of Mississippi. The applicant must have excellent moral character in conformity with the generally accepted standards customarily in effect in the University.

The University reserves the right to cancel the admission or registration of an individual whose attendance at the University, in the opinion of the appropriate administrative officer and the President, would not be beneficial to the student and/or to the institution.

Any student who is denied admission, whose admission is suspended, or who questions the type of admission granted, may have his or her case reviewed by the Graduate Committee for Admissions and Credits. To initiate the review procedure, the student should send a written request to the Dean of the Graduate School, Southern Station Box 5024, Hattiesburg, MS 39406-5024. Any request for review must be made within one year of the date of the denial or suspension or it cannot be considered by the Committee.

It should be clearly understood that the admission requirements listed below represent the minimal standards set by the Graduate Council and that additional requirements and higher standards may well be stipulated by the various department chairs. Applicants should check for such requirements in the departmental section of this Bulletin.

# TYPES OF ADMISSION TO MASTER'S PROGRAMS

An applicant may be granted regular or conditional admission to a masters program, or may be admitted as a non-degree graduate student.

#### I. Regular Admission

Minimum Standards for Regular Admission are as follows:

- A. The applicant must hold a baccalaureate degree from an institution approved by a recognized accrediting agency.
- **B**. The applicant must be eligible to re-enter in good standing the last college or university attended.
- C. The applicant must present evidence, by official transcript, of a grade point average of at least 2.75 (figured on an A equals 4.0 scale) for the last two years of undergraduate study, and a grade point average of at least 3.0 on undergraduate courses in the field of proposed graduate study. Any exception to this requirement must be cleared with the appropriate department chair, the dean concerned, and the Graduate Dean.
- D. Applicants must present acceptable test scores (GRE, GMAT, NTE or MAT). Consult specific departmental requirements for this information.
- E. The appropriate department chair, the college dean, and the Graduate Dean must be satisfied that the applicant shows promise of satisfying graduate degree requirements.

#### II. Conditional Admission

A student who does not meet the minimum admission standards for either grade point average or test scores (GRE, GMAT, NTE or MAT) may be admitted on a conditional basis in one of two ways:

- A. Present a test score acceptable for regular admission and a grade point average no lower than 2 50.
- **B.** Present a grade point average of 2.75 or above if the score is lower than that acceptable for regular admission.

Conditional admission can be given only upon the specific recommendation of the department chair, the college dean, and the Graduate Dean.

A conditional student at the master's level must maintain a grade point average of at least 3.00 on the first nine (9) semester hours of course work numbered 500 or above or on all courses taken while completing this nine (9) hour requirement. In some cases, additional requirements may be imposed by the department chair. All requirements must be met or the student will not be allowed to continue to seek a master's degree. A student not maintaining the required grade point average after the first nine (9) semester hours of course work, and/or failing to satisfy any additional requirements, will be reclassified as a non-degree graduate student.

All courses taken to remove conditional admission must be taken on a campus of The University of Southern Mississippi. Upon recommendation of the department chair and approval by the Dean of the Graduate School, the conditional admission will be removed and the student reclassified as a regular student.

# III. Non-Degree Graduate Student

Admission as a non-degree graduate student may be granted for any of the following reasons:

- A. He or she did not meet requirements for conditional or regular admission before the deadline. These admission requirements must be met and the Non-Degree status changed to conditional or regular by the end of the first full semester after the student enrolls in graduate courses in order to continue course work.
- **B.** He or she may or may not be able to meet admission requirements but does not desire to work toward a graduate degree.
- C. He or she is enrolled in another university and desires to obtain credit from The University of Southern Mississippi to be transferred to the graduate school in which he or she is seeking a degree.

# **Regulations Governing Non-Degree Graduate Students**

Even though a non-degree graduate student has been admitted to the University, he or she has not been admitted to any department or to any degree program. Moreover, no credit earned beyond the master's degree while classified as a non-degree student may be applied toward the doctoral degree. Non-degree graduate students must have the permission of the chair of the department offering the course and the Dean of the Graduate School to register for any graduate course. It is the responsibility of these students to check admission standards of the individual colleges before enrolling in their courses.

A non-degree graduate student must hold a baccalaureate degree from an accredited institution. To be allowed to continue as a non-degree graduate student, the student must consult with the department chair or academic adviser of the department in which he or she is taking courses during the first semester enrolled at the University regardless of whether or not the student plans to seek a degree.

No more than nine (9) semester hours earned while classified as a non-degree graduate student will be accepted toward a master's degree at The University of Southern Mississippi. A student must, therefore, gain conditional or regular admission before completing more than nine (9) semester hours of study for additional hours to be counted toward a master's degree.

#### TYPES OF ADMISSION TO ADVANCED GRADUATE STUDY

Advanced graduate programs leading to the specialist's degree or various doctoral degrees are available to qualified students. An applicant may be granted regular or conditional admission to these programs, or may be admitted as a non-degree graduate student.

#### I. Regular Admission

For regular admission to advanced graduate study, a student must present a grade point average no lower than 3.25 for the specialist's program or 3.50 for the doctoral program on previous graduate work and an acceptable test score on the aptitude phase of the **Graduate Record Examinations** (GRE). Some departments in the College of Education and Psychology accept the **National Teacher Examinations** (NTE) or the **Miller Analogies Test** (MAT) for admission to the specialist's program. All students seeking admission to a doctoral program must present scores on

the aptitude phase of the GRE. Consult departmental requirements for the scores required for specific degree programs.

#### II. Conditional Admission

For conditional admission to a specialist's program, a student must present either (a) a grade point average of between 3.00 and 3.25 and an acceptable test score (GRE or, where applicable, the NTE or MAT), or (b) a grade point average no lower than 3.25 if the test score does not meet the acceptable score for regular admission. For conditional admission to a doctoral program, a student must present either (a) a grade point average of between 3.25 and 3.50 and an acceptable test score (GRE), or (b) a grade point average no lower than 3.50 if the GRE score does not meet the acceptable score for regular admission.

A conditional student at the advanced graduate level must maintain a grade point average of at least 3.25 on the first nine (9) semester hours of course work numbered 600 or above or on all courses taken while completing this nine (9) hour requirement. In some cases, additional requirements may be imposed by the department chair. All requirements must be met or the student will not be allowed to continue to seek an advanced degree. A student not maintaining the required grade point average after the first nine (9) semester hours of course work, and/or failing to satisfy any additional requirements, will be reclassified as a non-degree graduate student.

All courses taken to remove conditional admission must be taken on a campus of The University of Southern Mississippi. Upon recommendation of the department chair and approval by the Dean of the Graduate School, the conditional admission will be removed and the student reclassified as a regular student.

For students who have their department's approval to change from the master's or specialist's program to a higher degree program, the chair and the dean should request the change in a written memorandum to the Graduate School Office. The Graduate School Office will verify that the minimum requirements for the higher degree are met.

### III. Non-Degree Graduate Student

An applicant for advanced study may be admitted as a non-degree graduate student; however, no credit earned as a non-degree graduate student may be applied to doctoral degrees. All non-degree graduate students at the advanced level must have the permission of the chair of the department offering the course and the Dean of the Graduate School to register for any graduate course.

# **Limitations on University Faculty Members**

Members of the faculty of the University of Southern Mississippi above the rank of instructor cannot become candidates for a doctoral degree at this institution. They may, however, enroll for graduate courses. Faculty members of the rank of instructor may become candidates for doctoral degrees at The University of Southern Mississippi on the same terms as any other advanced graduate student candidate.

#### STUDENTS DENIED ADMISSION

Students who have been denied admission to a program, but who wish to take graduate courses, may reapply for admission to the University as a non-degree seeking graduate student. All students in this category are treated as non-degree graduate students, and therefore must have the permission of the chair of the department offering the course and the Dean of the Graduate School to register for any graduate course.

#### PROCEDURES FOR APPLYING FOR ADMISSION

- Application materials are available from the Office of Recruiting, Box 5166, or in person at Graduate Admissions, Box 10066, Hattiesburg, MS 39406-0066.
- II. All credentials (application, recommendations, an official transcript from each institution attended) must be submitted to the Director of Graduate Admissions by the deadline published in the University Calendar.
- III. After all credentials are received, the Graduate Admissions Office will compute the applicant's grade point average and will forward the application and transcript to the appropriate department chair, college dean, and the Graduate Dean. As soon as the application has been processed by the department chair, the college dean concerned, and the Graduate Dean, the Office of Graduate Admissions will notify the applicant of the University's decision on the request for admission.

# Permission for Undergraduate Seniors to Register for Graduate Credit

Exceptionally well qualified undergraduate students at The University of Southern Mississippi may apply to the Graduate Office for permission to take course work for graduate credit if they are within nine (9) semester hours of meeting bachelor's degree requirements as certified by the University Registrar. If the Graduate Dean approves, the student may then register for graduate courses up to a maximum of six (6) semester hours of graduate credit with a total course load not exceeding twelve (12) semester hours. The student must complete requirements for the baccalaureate degree within the first semester/term in which he or she registers for graduate courses. The student's application for admission to the Graduate School will not be given final approval until after he or she satisfies all requirements for the baccalaureate degree.

An undergraduate student from another institution desiring to take graduate courses as listed above should file a graduate application, pay the appropriate fee, have a transcript sent to the Dean of the Graduate School and ask for permission to take a graduate class.

#### STUDENT EXPENSES

The University of Southern Mississippi is supported chiefly by legislative appropriations. Increases in student fees are put into effect only when public support funds are inadequate and no other recourse is available. Increases are made only for support of the institution or improvement of the activity program of the students; therefore the University must reserve the right to increase or modify fees and expenses without prior notice but with approval of the Board of Trustees of State Institutions of Higher Learning.

Fees and expenses are in the form of general tuition, room and board, and special fees.

**GENERAL TUITION.** This fee, together with the allocation from the legislative appropriation, is used for general support of the University. Athletic activities and UAC programs are not included for part-time students.

Full-time students for purposes of assessing fees are those who take nine (9) or more semester hours in Graduate School and twelve (12) or more semester hours in all other colleges during fall and spring semesters. During summer terms, seven (7) or more semester hours for Graduate School and nine (9) or more semester hours in all other colleges constitute full-time students for purposes of assessing fees. Undergraduate students enrolled for more than nineteen (19) semester hours during fall and spring semesters and for more than fourteen (14) semester hours during the summer term will be assessed the applicable fee for each additional semester hour. Graduate students enrolled for more than thirteen (13) semester hours during fall and spring semesters and for more than fourteen (14) semester hours during the summer term will be assessed the applicable fee for each additional semester hour.

Clinical and hospital services covered by the health service charge included in the general tuition fee are limited to cases of ordinary illness. Services are provided within the limits of the professional, technical, and physical resources of the Clinic. The University does not assume responsibility in cases of extended illness or for treatment of chronic diseases. Cases requiring surgery must be handled by a physician and hospital of the student's choice and at the student's expense.

ROOM AND BOARD. The room and board fees are assessed for all students living in University controlled residence halls and those students living in fraternity houses. Board is available to all other students on an optional basis. Two meal plans are available; a seven-day 21 meal plan and a five-day 15 meal plan. Lite Line meals and diet counseling are available at no extra charge.

A room deposit is payable in advance for the reservation of space in the residence hall. This amount is held as a damage deposit until a student withdraws from the residence hall. Upon withdrawal, the student must make an application to the Resident Manager of the dormitory for refund. When a student reserves a room in a residence hall, he or she obligates himself or herself to pay for both fall and spring semesters' room rent unless the student cancels his or her assignment in writing before the residence halls open for the fall semester. A rent refund will be made only upon withdrawal from the University.

**TELEPHONE SERVICE.** Telephone service in residence halls and family student housing is provided to students through the University telephone system. The cost of sharing **local telephone service** is included as a part of housing rent. For long distance service, students may use the University's system by completing an application at the Campus Telephone Office, Hub Building, Room 104. Long distance telephone authorization and a caller identification will then be issued. Long distance calls are billed to the student on a monthly basis. Charges must be settled prior to leaving the University (including graduation, withdrawal, and semester breaks).

**POST OFFICE BOX.** The post office box fee is assessed for all students living in University-controlled housing. Those students living off campus may rent a post office box if they so desire.

STUDENT IDENTIFICATION CARDS. The ID card is a permanent card for each student. The fall semester (permanent) ID card will also be used for spring and summer semesters each year by revalidation. The same card must be kept, re-validated and used even when returning from a previous year or semester. Do not destroy, lose, bend or tamper with an ID card. Only one card will be issued at no charge during a five (5) year period. A fee of \$10.00 will be charged at the time a replacement card is made.

OTHER FINANCIAL INFORMATION. One-half of a student's total fees are due and payable at the time of registration. Students with University loans, grants, or scholarships may use those funds as payment for the first half of total fees. Loans, grants, scholarships, and checks made payable to the University must be applied to fees in full before a refund or change can be given. Fees deferred past the day to register each term will be billed monthly. A monthly service charge of 1.5% will be applied to the unpaid balance.

The University reserves the right to withhold readmission to a student until all delinquent accounts have been paid. In fact, all past due accounts will be included on registration fee invoices and monthly bills. Transcripts of credits will not be issued for students whose accounts are delinquent. All fees must be paid before a degree will be awarded.

Fines accumulated as a result of failure to adhere to the established procedures of the University, such as Library and Public Safety regulations, or any other policy establishing regulations for the protection of University property, shall become collectable by the Business Office, and, if not collected, shall constitute a delinquent account.

A non-refundable registration fee of \$5.00 will be assessed all students.

A fee of \$50.00 will be assessed students who register during the late registration period.

Students whose checks for registration fees are returned will be assessed the late registration fee of \$50.00 in addition to the \$6.00 returned check handling fee. Returned checks not promptly paid may result in dismissal from the University.

A fee of \$15.00 for operation of the University Union is included in the fees of all full-time students. A \$1.00 fee is added to the general tuition fee assessment of part-time students.

A \$2.50 per hour fee for use of the University Clinic by part-time students is included in the per hour fee shown below.

A fee of \$3.00 for Intramural Facilities is included in the fees of all full-time students. A \$1.00 fee is added to the general tuition fee assessment of part-time students.

A special building fee will be assessed each semester for the support of the Payne Center. These fees are shown below. The students at The University of Southern Mississippi voted April 10, 1984 in favor of this fee.

A special library fee of \$5.00 is included in the fees for full-time students. A \$1.00 fee is added to the first hour for part-time students with an additional \$2.00 being added to the sixth hour.

Courses requiring special fees and music fees are shown in the Special Fee listing and are indicated by a plus sign in the Course Description Section of this **Bulletin**.

#### RESIDENCE STATUS

LEGAL RESIDENCE OF STUDENTS: The definitions and conditions stated here are as required by state law in the classification of students as residents or nonresidents for the assessment of fees. Requests for a review of residency classification should be submitted to the Office of Admissions and Records; forms for this purpose are available from the Office of Admissions and Records.

A MINOR: The residence of a person less than twenty-one years of age is that of the father. After the death of the father, the residence of the minor is that of the mother. If the parents are divorced, the residence of the minor is that of the parent who was granted custody by the court; or, if custody was not granted, the residence continues to be that of the father. If both parents are dead, the residence of the minor is that of the last surviving parent at the time of that parent's death, unless the minor lives with a legal guardian of his or her person duly appointed by a proper court of Mississippi, in which case his or her residence becomes that of the guardian.

AN ADULT: The residence of an adult is that place where he or she is domiciled, that is, the place where he or she actually physically resides with the intention of remaining there indefinitely or of returning there permanently when temporarily absent. Adult students who are residing outside of the State of Mississippi, but whose parents have moved to this state and have become residents, must establish residence in their own right. In determining residence for tuition purposes for persons who return to Mississippi after temporary departures such as school attendance, work elsewhere or military service, cognizance is taken of evidence showing continuity of state residence and demonstrated intent to return to the state.

**REMOVAL OF PARENTS FROM MISSISSIPPI:** If the parents of a minor who is enrolled as a student in an institution of higher learning move their legal residence from the State of Mississippi, the minor is immediately classified as a nonresident student.

TWELVE MONTHS OF RESIDENCE REQUIRED: No student may be admitted to the University as a resident of Mississippi unless his or her residence, as defined herein-above, has been in the State of Mississippi for a continuous period of at least twelve months immediately preceding his or her admission.

A student who has lived within the state for twelve months **following** his or her twenty-first birthday may establish residence in his or her own right by showing that he or she is living in the state with the intention of abandoning his or her former domicile and remaining in the State of Mississippi permanently, or for an indefinite length of time. Intent may be demonstrated or disproved by factors including, but not limited to, filing of Mississippi income tax returns, eligibility to vote in Mississippi, motor vehicle registration in Mississippi, possession of Mississippi operator's license, place of employment, and self support.

**RESIDENCE STATUS OF A MARRIED PERSON:** A married person may claim the residence of his or her spouse.

CHILDREN OF PARENTS WHO ARE EMPLOYED BY THE UNIVERSITY: Children of parents who are members of the faculty or staff of the University may be classified as residents without regard to the residence requirements of twelve months.

MILITARY PERSONNEL ASSIGNED ON ACTIVE DUTY STATION IN MISSISSIPPI: Members of the armed forces on extended active duty and stationed within the State of Mississippi may be classified as residents, without regard to the residence requirement of twelve months, for the purpose of attendance at the University. Resident status of such military personnel who are not legal residents of Mississippi, as defined above under LEGAL RESIDENCE OF AN ADULT, shall terminate upon their reassignment for duty in the continental United States outside the State of Mississippi.

CHILDREN OF MILITARY PERSONNEL: Resident status of children of members of the armed forces on extended active duty shall be that of the military parent for the purpose of attending the University during the time that their military parents are stationed within the State of Mississippi and shall be continued through the time that military parents are stationed in an overseas area with last duty assignment within the State of Mississippi, excepting temporary training assignments en route from Mississippi. Resident status of minor children shall terminate upon reassignment under permanent change of station orders of their military parents for duty in the continental United States outside the State of Mississippi, excepting temporary training assignments en route from Mississippi.

CERTIFICATION OF RESIDENCE OF MILITARY PERSONNEL: A military person on active duty stationed in Mississippi who wishes to avail himself or herself or his or her dependents of the provisions of the paragraph titled MILITARY PERSONNEL ASSIGNED ON ACTIVE DUTY STATION IN MISSISSIPPI must submit a certificate from his or her military organization

showing the name of the military member, the name of the dependent, if for a dependent, the name of the organization of assignment and its address (may be in the letterhead), that the military member will be on active duty stationed in Mississippi on the date of registration at the University; that the military member is not on transfer orders; and the signature of the commanding officer, the adjutant, or the personnel officer of the unit of assignment with signer's rank and title. A military certificate must be presented to the Registrar of the University each semester at (or within ten days prior to) registration for the provisions of the paragraph MILITARY PERSONNEL ASSIGNED ON ACTIVE DUTY STATION IN MISSISSIPPI, named above, to be effective.

LEGAL RESIDENCE OF A FOREIGN STUDENT: Students with permanent immigrant status or refugee status can establish residence in the state by meeting the provisions of the Mississippi Statute.

**PETITIONS FOR CHANGE OF RESIDENCY:** Petitions for change of residency must be made on or before the last day of late registration. Forms are available in the Office of Admissions and Records.

STUDENTS HOLDING ASSISTANTSHIPS: Non-resident students holding University financed assistantships will not be required to pay the non-resident fee during the time they hold such appointments.

### **REFUND POLICY:**

(Room and board fees, tuition, out-of-state fees, student fees, book charges and special fees.)

A student who officially withdraws after enrollment may obtain a refund based on the following schedule:

Withdrawal prior to the first day of classes of any term...100% less a \$25 withdrawal fee.

Commencing with the first day that day classes meet each term:

Fall and Spring Semesters.  The first through the fifth working day  The sixth through the fifteenth working day  The sixteenth through the thirtieth working day  After the thirtieth working day	
S and SS Fall and Spring Semesters. Prior to and including the last day to register for or add S and SS courses	
Fall, Winter, Spring and Summer Terms The first through the fifth working day The sixth through the tenth working day	
The eleventh through the twentieth working day	50%
The eleventh through the twentieth working day	

Refunds are based on the assessment and not upon the amount paid by the student. The refund schedule above applies to students who drop to an hourly load below full-time or from an overload to full-time or below.

The \$5 registration fee is non-refundable.

Appeals for refunds due to extenuating circumstances may be made in writing to: Vice President for Business and Finance, Southern Station, Box 5005, Hattiesburg, MS 39406-5005.

Students who find it necessary to withdraw from the University must submit written requests to the Dean of the Graduate School who will initiate the Withdrawal and Refund Form.

#### **EXPENSES EACH UNIVERSITY SEMESTER/SESSION**

(All fees are subject to change without notice.)

FIXED FEES	FALL, SPRING	SUMMER
ELLI TIME CTUDENTO	SEMESTERS	SESSION
FULL-TIME STUDENTS	61 146 00	¢70.6.00
General Tuition		\$786.00
Building Fee—Payne Center (per student)		45.00
Registration Fee (per student).	5.00	5.00
Housing Rent:		
Hillcrest, Elam Arms, Mississippi, Hattiesburg	<b></b>	450.00
and Vann	6/5.00	450.00
Roberts, Scott, Jones, Pulley, Bolton, Wilber,	600.00	400.00
Hickman and Bond	600.00	400.00
Pine Haven Apartments:		
1-bedroom		532.00
2-bedroom		566.00
3-bedroom	898.00	599.00
Board:		
5-Day Plan		295.00
7-Day Plan	560.00	330.00
Other Fees When Applicable:		
Non-resident Fee		196.00
*The Southerner	12.00	
**Post Office Box	10.00	10.00
PART-TIME STUDENTS—Each Semester Hour—	_	
Hattiesburg Campus:		
General Tuition—graduate student	114.00	114.00
General Tuition—undergraduate student		86.00
Building Fee—Payne Center (per student):		00.00
Graduate 6-8 hrs	10.00	
Less than 6 hrs		
Less than 7 hrs		5.00
Undergraduate 9-11 hrs		5.00
Less than 9 hrs		5.00
Library Fee (per student)—an additional \$2.00		5.00
is added to the 6th hour	1.00	1.00
		5.00
Registration Fee (per student)		3.00
Graduate student	137.00	28.00
		28.00
Undergraduate student* *Non-refundable Charged the first semester attended each ve		

<sup>\*</sup>Non-refundable. Charged the first semester attended each year to all full-time undergraduate students. Optional to all other students.

<sup>\*\*</sup>Non-refundable. Optional to students living off campus. Assessed: \$10.00 Fall; \$10.00 Spring; \$10.00 Summer. General tuition, room, board, and post office, if applicable, are payable each semester/session.

# SPECIAL FEES AND EXPENSES

SPECIAL FEES AND EXPENSE	2	
Departmental Fees:		
BSC, all BSC laboratory courses	\$15.00	per course
CET 570L, 571L, 578L, 672, 501L, 520L, 572L, 577L	15.00	per course
CHE 511L, 527L, 528L, 561L, 562L	15.00	per course
CSS 500, 501, 502, 503, 630		107 - 1
631, 632, 633, 637	15.00	per course
CSC 620, 632, 638, 640	15.00	per course
EET 512L, ENT 530L, 570L	15.00	per course
GHY 510L, 512L, 516L, 517L	10.00	per course
GLY, all GLY laboratory courses	15.00	per course
LS 505	15.00	per course
LS 516, 622, 623		per course
MAT 518, 519, 560, 561	15.00	per course
MTC 501, 502L, 503, 504L, 505, 506L, 507, 508, 509, 522, 526	\$15.00	per course
PSC 570L, 720L, 721L		per course
REF 516, 616, 622, 623	7.50	per course
SCE 532, 561		per course
Music Fees—Private lessons for other than full-time		•
music majors and for music majors taking private		
lessons not required for the degree being pursued:		
Each semester hour per instructor	35.00	
Orchestral or Band Instrument Rental	15.00	per semester
Locker Rental		per semester
Examinations and Degrees:		\
Miller Analogies Test	35.00	when applicable
Revalidation Examination		when applicable
Special Examination		when applicable
Application for Degree		when applicable
Bachelor's	40.00	
Master's.		
Specialist's		
Doctoral		
Thesis binding per copy		when applicable
	10.00	when applicable
Registration and Records:	25.00	1. 12 1.1
Cooperative Education		when applicable
Late Registration	50.00	
Registration Fee for International Students	25.00	1.1 11 .1
(Non-refundable)		with application
Memorandum of Credits		each
Transcript of Credits	2.00	each
Division of Continuing Education and Resident Center		
Resident Center		
Graduate Course	.\$ 111.00	per semester hour
Resident Center—Laboratory fee	6.00	per course
Resident Center—Typing fee	5.00	per course
Extension Center		
Graduate Course		per semester hour
Registration Fee (per student)	5.00	

Special fees are not normally refundable. However, requests for refunds of special fees will be based on circumstances existing at the times of requests.

<sup>\*</sup>This includes hood rental (Hoods may be purchased through the Bookstore) and the dissertation binding fee for four copies. One additional copy may be ordered for \$10.00.

# AVAILABLE FINANCIAL ASSISTANCE FOR GRADUATE STUDENTS

At present the University has available some 400 master's and 150 doctoral University assistantships in all areas as well as fellowships provided by federal and private agencies. Though amounts may vary from department to department, University assistantships range from \$3400 to \$6000 per academic year at the master's level and from \$4800 to \$12,000 per academic year at the doctoral level and entail one-half time of teaching or research assignment. To maintain an assistantship a student must have an average of B or better each semester. General tuition and the non-resident fee are waived for graduate assistantship holders. To qualify for this waiver, students on assistantships must be registered for courses totaling twelve (12) hours each semester (9 hours during Summer term). Courses taken as Audit do not count toward these hours. The University also currently waives out-of-state tuition for students on sabbatical leave with pay from schools and colleges.

Inquiries regarding assistantships should be directed to the Dean of the Graduate School. Applications for assistantships must be filed by May 15.

The Perkins Loan Program (formerly NDSL), and the Federal Work-Study Program, and State Student Incentive Grant are also available to graduate students. (See the Financial Aid section of the **Undergraduate Bulletin** for detailed information about the Perkins & FWS Programs.) Applicants for Perkins Loans and Federal Work-Study Program should apply by **March 15** (priority date) for loans and work to begin the fall term. Applications for the Perkins Loan Program, and the Federal

Work-Study Program may be secured by writing the Office of Financial Aid.

#### CAREER PLANNING AND PLACEMENT

The Office of Career Planning and Placement, located on the first floor of McLemore Hall, offers the student three types of employment assistance while attending the University: part-time employment, cooperative education employment, and career employment upon graduation.

The **Student Employment Division** offers the student an opportunity to obtain part-time employment while enrolled as a regular student at USM. The service is comprehensive in that it will involve jobs for work-study as well as non-work-study both on and off campus.

The Cooperative Education Program affords the student the opportunity to gain a complete education with periods of work related to the student's major. The Cooperative Education Office assists in securing meaningful jobs that will give the student practical work experience and financial support to aid in his or her education. The basic qualifications for the undergraduate Co-op Programs are as follows:

- 1. The student must maintain at least a 2.50 GPA.
- The student must attend USM or a regional campus at least one semester prior to his or her placement.

A student is eligible to enter the program at any time during his or her career at USM. Transfer students who have been in a co-op program with another university may transfer into the USM program and maintain their original job.

Salaries of co-op students vary depending on the type of degree they are pursuing and the amount of co-op experience they have.

The Office of Cooperative Education will determine the eligibility of the student to participate in the program. Each student's record of performance will be periodically reviewed, once an active participant, and he or she may be placed on probation or removed from the program when not meeting minimum requirements.

The Placement Center provides assistance to graduating seniors, graduates, and alumni in obtaining career employment upon or after graduation. Students seeking career employment should establish a placement credentials file during the last semester of their junior year or the first semester of their senior year. These credentials are valuable to prospective employers who are seeking information on college graduates for possible employment. The services may be used by the graduate as often as is needed.

#### For additional information, contact the:

Student Employment Division Box 5014 Hattiesburg, MS 39406-5014 (601) 266-4157 Cooperative Education Program Box 5014 Hattiesburg, MS 39406-5014 (601) 266-4844

The Placement Center Box 5014 Hattiesburg, MS 39406-5014 (601) 266-4153

# GENERAL ACADEMIC REQUIREMENTS

It is reasonable to assume that a graduate student accepts full responsibility for knowing the policies and regulations of the Graduate School and the departmental requirements relevant to his or her individual degree program.

Only the general academic regulations and requirements governing all graduate programs are given below. Specific requirements pertaining to individual degree programs are outlined within the department sections.

# **Course Work and Grading System**

Courses open to graduate students for graduate credit are those numbered 500 or above.

Many courses have certain prerequisites. A student who wishes to register for a particular course must satisfy the department concerned that he or she has had preparation adequate for admission to the course.

The grading system in the Graduate School is as follows:

- A— Indicates that the student's work is of unusually high quality.
- **B** Indicates that the student's work is of high but not exceptional quality.
- **C** Indicates that the student has met the minimum requirements for passing the course.
- D— Indicates that the student's work is below that which is expected of a graduate student. A course in which the student has earned a grade of D will not apply toward a graduate degree. A student who earns more than six (6) semester hours in grades of D or below may not be considered as a candidate for a degree.
- E— Indicates a course in progress. It is to be used only for thesis and dissertation credit while in progress.
- **F** Indicates that the student has failed the course. A student who accumulates more than three (3) semester hours of F grades will not be considered as a candidate for a degree.
- I— Indicates an incomplete record. An I is treated as an F if not removed within one term of attendance.
- P— Indicates completion of thesis and dissertation credit and is assigned only upon completion. Also used for grades in courses numbered 697 and 797.
- W— Indicates withdrawal from a course passing.
- X— Indicates failure to drop or withdraw properly before deadline. Upon completion of the drop/withdrawal form by the student in the Office of Admissions and Records, the Registrar is authorized to replace the grade of X with a W.

Fuller explanation of the grading system is in the Undergraduate Bulletin.

The general regulation that degree work must be completed within a six-year period applies to all course work.

A grade-point average of  ${\bf B}$  or better is required of all candidates for graduate degrees by the time they complete the course-hour requirements for the degree.

The use of the Pass/Fail option at the Graduate level for any course except those listed above MUST BE APPROVED BY THE GRADUATE COUNCIL.

On the recommendation of the student's committee or major professor, a student may retake one graduate level course in order to improve his grade point average.

# **Grade Review Policy**

The instructor (defined as one who has the responsibility for a class, special problem, thesis or dissertation) has the authority in his or her class over all matters affecting the conduct of the class, including the assignment of grades. Student performance should be evaluated according to academic criteria made available to all students within the first two weeks of each semester. Grades should not be determined in an arbitrary or capricious manner.

#### Course Loads

- I. Although the maximum load of a full-time graduate student is sixteen (16) semester hours, the normal load for a full-time graduate student is generally considered to be twelve (12) semester hours.
- II. The minimum load for a full-time graduate student is nine (9) semester hours for students living in Pine Haven, using the services of the Clinic, using the services of Veteran's Affairs, or using other such services of the University.
- III. Twelve (12) hours is the maximum load for a graduate fellow teaching one undergraduate class or its equivalent. In no case may the total hours involved in a student's program, including both the course work and the assistantship assignment, exceed sixteen (16) hours.
- IV. The courses numbered 697 and 797—Independent Study and Research—may be taken for any amount of credit (up to a maximum of sixteen (16) hours in any one semester) with the exception that students who are not in residence but who are actively working on a thesis, research problem, or dissertation and consulting with the major professor or making use of the library or other University facilities must enroll for at least three (3) hours each semester.
- V. Students enrolling only for 698, 798, or 898 or courses entitled "Internship" such as CPY 861 should enroll for a minimum of three hours, or PSY 796 for a minimum of four hours.
- VI. Students enrolling only for 691, 791, or 891 (or other courses titled "Research in...") should enroll for a minimum of three hours.

# MASTER'S DEGREE REQUIREMENTS

A convenient checklist of master's degree requirements may be procured in the Graduate Office.

#### I. Credit Hours

A minimum of thirty (30) semester hours credit is required for any master's degree. Many departments require more than the minimum. Consult specific college and departmental requirements for additional information.

#### II. Time Limitation

The student must complete the master's degree within six calendar years from the date of initial enrollment in a graduate program. Six years is the maximum age allowed for graduate credits toward a master's degree. If more than six years are needed to complete requirements, the Graduate Dean, under extenuating circumstances, and special petition, may revalidate over-age credit hours if the original credit was earned at The University of Southern Mississippi and if the dean of the college concerned approves the revalidation. The revalidation is secured by the student's successfully passing a special examination on the course. However, any student who fails to complete the master's degree program within the six-year time period becomes subject to any changes in degree requirements made at any date six years prior to graduation. The fee charged for the special revalidation examination is \$30.00 per course. The fee is to be paid before the validation examination is taken. Over-age extension courses cannot be revalidated.

#### III. Credit Hours Limitations

- A. At least half of the semester hours required for a degree program must be earned on a campus of The University of Southern Mississippi.
- **B.** A minimum of fifty per cent of the credit earned at The University of Southern Mississippi must be taken on the campus from which the degree is awarded.
- C. A minimum of eighteen (18) semester hours must be in courses numbered 600 or above.
- D. A total of no more than nine (9) semester hours of work earned as a non-degree student may be applied toward a master's degree. Please note F below.\_
- E. As many as six (6) semester hours of graduate credit from other accredited institutions may be transferred to the student's program with the approval of the appropriate department chair and the Graduate Dean provided that the course work transferred falls within the six-year period allowed for the degree.
- **F.** A total of no more than nine (9) semester hours of transfer work and non-degree work may be applied toward a master's degree.

#### IV. The Master's Committee

The student's work toward the master's degree is supervised by a departmental committee composed of a chair and at least two members recommended by the department chair and appointed by the Graduate Dean.

#### V. The Minor Field

If a minor field is required in the master's program, it shall consist of a minimum of nine (9) semester hours of course work.

#### VI. The Master's Thesis

- A. The degree of Master of Arts entails the writing of a thesis (698. Thesis, 6 hrs.). For the degrees of Master of Science and Master of Education, some programs offer a non-thesis option. Students intending to pursue a degree higher than the master's are encouraged to write a thesis.
- **B.** As appropriate, the Human Subjects Protection Review Committee and/or the Institutional Animal Care and Use Committee must approve the thesis topic.
- C. A separate bulletin outlining University requirements concerning the preparation of theses is available in the Graduate Office.
- D. The student must register for at least three (3) hours of 698 during the semester/term in which he or she expects to defend the thesis. Students who have previously registered for the maximum total of six (6) hours of 698, and/or who are not in residence, but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University, must register for at least three (3) hours of 697-Independent Study and Research.

#### VII. Examinations

- A. The aptitude phase of the Graduate Record Examinations or the Graduate
  Management Admission Test is required for admission into the Graduate School.
  Individual departments may require the advanced area tests. Some departments in the
  College of Education and Psychology accept the National Teacher Examinations or the
  Miller Analogies Test.
- B. Some master's degree programs, particularly programs leading to the Master of Arts, include a foreign language requirement. Students should refer to the section of this Bulletin describing individual departments and schools to determine whether specific requirements have been established for a program of interest. A student may demonstrate proficiency in a foreign language by any of several options; the particular option followed by the student must have the approval of the student's advisory committee and the Dean of the Graduate School. The options are as follows:
  - Completion of six (6) semester hours with grades of C or better in one of the following language sequences: FRE 501-502, SPA 501-502, or GER 501-502. These courses are specifically designed to meet The University of Southern Mississippi Graduate School foreign language requirements.
  - 2. Completion of nine (9) semester hours (undergraduate or graduate) with grades of C or better in an approved foreign language. The courses listed above in option 1 may not be included as part of these 9 hours. The student may transfer these hours from an accredited institution upon admission to the Graduate School, provided that the most advanced of the courses was taken within the last six (6) calendar years. After admission, courses taken to satisfy the foreign language requirement by this option must be taken at The University of Southern Mississippi or may be taken at another institution if written approval of the specific courses and institution is obtained from the student's advisory committee, the chair of the Department of Foreign Languages and Literatures, and the Dean of the Graduate School.
  - 3. Completion of the Graduate School Foreign Language Test (GSFLT) with a score of 460 or above. Students may procure the proper registration forms for this examination from the Office of the Director of Student Counseling. This examination is available in French, German, Spanish, and Russian.

Demonstration of proficiency by any means other than these options must be done by a method recommended and approved by the student's advisory committee, the Chair of the Department of Foreign Languages and Literatures, and the Dean of the Graduate School.

# SPECIALIST'S DEGREE REQUIREMENTS

The specialist's degree earned in the Departments of Educational Leadership and Research, Curriculum and Instruction, Psychology and Special Education provides sixth-year programs designed to prepare students for positions in school administration, advanced technical education for business, teacher training, and counseling, and to develop research and evaluation specialists for the public schools. Individual programs and requirements are fully described in the departmental sections of this Bulletin.

Students who are seeking the specialist's degree must meet all degree requirements relating to the master's degree, must earn at least thirty-three (33) semester hours beyond the master's degree, must write an acceptable thesis (798) and defend it via an oral examination, or complete a field-based problem, and must complete one full-time semester/term of residence taking all nine (9) semester hours on the Hattiesburg Campus.

A maximum of nine (9) semester hours earned as a non-degree student may be applied to the specialist's degree.

# DOCTORAL DEGREE REQUIREMENTS

A convenient checklist of doctoral degree requirements and calendar deadlines may be obtained in the Graduate Office.

#### I. Credit Hours

All doctoral degrees entail a minimum of eighty-four (84) semester hours of course work beyond the bachelor's degree or fifty-four (54) semester hours of course work beyond the master's degree.

# II. Time Limitations

With special petition, Courses taken above the master's degree or its equivalent which will fit into the degree program but which are six or more years old at the time of admission to the advanced graduate program may be counted toward meeting degree requirements when recommended by the department chair and approved by the Graduate Dean. The comprehensive examination must be completed within a period of six years after the student has been admitted to advanced graduate standing at The University of Southern Mississippi.

#### III. Credit Hour Limitations

- **A.** A minimum of thirty-two (32) semester hours of work beyond the master's degree must be earned on the University's Hattiesburg Campus.
- B. Transfer of credit for graduate work done at other institutions must be approved by the department chair and Graduate Dean. Final evaluation of and acceptance of transfer credit will not be made until the student has been in residence for one semester/term. Transfer of credit for doctoral degree programs is limited to not more than six (6) semester hours or nine (9) quarter hours beyond the master's degree. Exceptions to this restriction may be made with the approval of the department chair and the Graduate Dean.
- C. Credit earned as a non-degree graduate student cannot be applied toward a doctoral degree.

#### IV. Residency

Residency "refers to a period during which the candidate is on the campus engaged in intensive study, sustained association with faculty members and other colleagues who share common scholarly and professional interests, attendance at seminars and colloquia, intensive reading and familiarization with library resources, consultation with specialists in other disciplines and resource centers, and the opportunity for broadened exposure to current intellectual issues as they are revealed in various campus offerings. In short, the requirement is not an inflicted ritual, but an opportunity." The residency requirements for the doctoral degree can be fulfilled by the completion of 24 graduate hours of continuous study on the Hattiesburg Campus within the time limit of a minimum of two consecutive semesters (including the full summer session). During this period the student is obligated to devote full time to graduate work and to earn at least 12 semester hours of credit in each of the two semesters. Residency may begin only after the student is admitted to a doctoral program as a regular student.

A student who holds a fellowship or assistantship may fulfill the residency requirement by earning a total of twenty-four (24) semester hours within three (3) consecutive semesters/terms.

A student should not attempt to fulfill the residency requirements if he or she is gainfully employed full-time.

While the above are generalized University residency requirements, students are reminded that many departments have additional residency requirements and some departments have specialized options to meet particular needs. Therefore, all residency plans must be approved in writing by the department chair before residency is begun.

R. Kruh, Council of Graduate Schools in the United States, September, 1977.

#### V. The Doctoral Committee

The student's work toward the doctoral degree is supervised by a departmental committee composed of a chair and at least four members recommended by the department chair and appointed by the Graduate Dean. Qualified individuals from outside the University may serve if they have specialized knowledge needed by the student.

#### VI. The Minor Field

If a minor field is required in the doctoral program, it shall consist of twelve (12) semester hours of course work and may consist of courses from a number of related areas.

#### VII. Examinations

- A. The aptitude phase of the Graduate Record Examinations or the Graduate

  Management Admission Test is required for admission into the Graduate School.

  Individual departments may require the advanced area tests.
- **B.** The Miller Analogies Test is a departmental option for doctoral students in the College of Education and Psychology.
- C. The foreign language and statistics requirements for the doctoral degree may be fulfilled in several ways:
  - The Doctor of Education degree does not require foreign language proficiency.
     However, the student must establish proficiency in statistics or computer science
     either by examination or by completing a prescribed course sequence, the credit
     hours for which do not apply toward the degree.

Doctor of Music Education and Doctor of Musical Arts degrees require proficiency in at least one foreign language. Students in these programs should refer to the section of this Bulletin describing those programs and should consult the appropriate department chair for more information.

- 2. The Doctor of Philosophy degree requires either (a) proficiency in two languages, (b) proficiency in one language and in statistics or computer science, or (c) proficiency in one language and the completion of a nine-hour minor, the hours for which do not apply toward the degree. The procedure for satisfying proficiency in a specific computer language has been approved by the Graduate Council and is administered by the Department of Computer Science and Statistics. Students should refer to the section of this Bulletin describing individual departments and schools to determine whether specific requirements have been established for a program of interest. A request to use a language (including native language) other than French, German, Spanish, or Russian shall include evidence of research reported in the language (e.g. a bibliography), and must be recommended by the student's advisory committee and approved by the Dean of the Graduate School. A student may demonstrate proficiency in a foreign language by any of several options; the particular option followed by the student must have the approval of the student's advisory committee and the Dean of the Graduate School. The options are as follows:
  - 1. Completion of six (6) semester hours with grades of C or better in one of the following language sequences: FRE 501-502, SPA 501-502, or GER 501-502. These courses are specifically designed to meet The University of Southern Mississippi Graduate School foreign language requirements.
  - 2. Completion of nine (9) semester hours (undergraduate or graduate) with grades of C or better in an approved foreign language. The courses listed above in option 1 may not be included as part of these 9 hours. The student may transfer these hours from an accredited institution upon admission to the Graduate School, provided that the most advanced of the courses was taken within the last six (6) calendar years. After admission, courses taken to satisfy the foreign language requirement by this option must be taken at The University of Southern Mississippi or may be taken at another institution if written approval of the specific courses and institution is obtained from the student's advisory committee, the chair of the Department of Foreign Languages and Literatures, and the Dean of the Graduate School.
  - 3. Completion of the Graduate School Foreign Language Test (GSFLT) with a score of 460 or above. Students may procure the proper registration forms for this examination from the Office of the Director of Student Counseling. This examination is available in French, German, Spanish, and Russian,
- C. Demonstration of proficiency by any means other than these options must be done by a method recommended and approved by the student's advisory committee, the Chair of the Department of Foreign Languages and Literatures, and the Dean of the Graduate School.
- D. All students must have a written and/or oral doctoral qualifying examination in their field. This requirement should be completed during the first semester/term of the student's enrollment and is designed both to judge the student's fitness to pursue doctoral work and to guide the advisory committee in planning the student's program. The qualifying examination may be retaken only once.
- E. At the completion of specified required course work and other examinations, the doctoral student is required to take a written and/or oral comprehensive examination in his or her major and minor field. A student who does unsatisfactory work on the comprehensive examination may be granted a second examination at the next regularly scheduled time, or later. The student's doctoral committee will recommend the conditions to be met before the examination may be repeated. The comprehensive examinations may be retaken only once.
- F. After the dissertation has been accepted and after all required course work has been completed, but at least four weeks before the candidate is scheduled to receive the degree, a final oral examination on the dissertation and related fields (dissertation defense) will be conducted by the student's advisory committee and any other faculty members designated by the Graduate Dean. The examination will be open to any member of the graduate faculty.

#### VIII. The Dissertation

- A. The dissertation topic must be approved by the student's major professor and advisory committee and must be an original and significant contribution to knowledge in the chosen field. As appropriate, the Human Subjects Protection Review Committee and/or the Institutional Animal Care and Use Committee must approve the topic.
- **B.** A separate bulletin outlining University requirements concerning the preparation of dissertations is available in the Graduate Office.
- C. The student must complete a total of twelve (12) hours of 898 Dissertation.
- D. The student must register for at least three (3) hours of 898 during the semester/term in which he or she expects to defend the dissertation. Students who have previously registered for the maximum total of twelve (12) hours of 898, and/or who are not in residence, but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must register for at least three (3) hours of 797-Independent Study and Research. While a student may register for coursework during the semester/term he or she defends the dissertation, all REQUIRED courses must be completed before the term the student defends.

#### IX. The Dissertation Defense

After the doctoral committee members have been adequately consulted about results of the student's research as well as the form and condition of the manuscript, the committee chair will schedule the defense with the Graduate School Office and other appropriate offices at least ten days in advance of the defense. The Graduate School will notify members of the faculty of the time and place of the defense. The meeting will be open to any member of the faculty and, at the discretion of the chair, may be opened to the public.

The chair, with advice from the committee, has complete authority for the conduct of the defense. The chair may recognize those wishing to ask questions about the candidate's research. Questions and resulting discussion should be appropriate for this important event. The chair may end the open part of the defense by restricting the meet\ ing to the committee after an appropriate time. Discussion of the results of the defense must be limited to the committee members. A majority vote will determine the result of the defense and shall be reported to the Graduate School Office at the close of the meeting.

#### X. Documents

The doctoral student must file a number of documents with the Graduate Office.

- A. After completing all the requirements for the doctoral degree other than the dissertation and at least one semester/term prior to graduation, the student must file two copies of the "Application for Candidacy" form with the Graduate Office and one copy with the adviser, before or at the same time the application for degree is filed.
- **B.** The student should present two copies of the "Application for Degree" form, stamped by the Business Office to verify payment of fees, to the Graduate Office during the semester/term preceding that of graduation.
- C. When completed, the student's file in the Graduate Office should contain, in addition to the two documents described above, statements from the adviser and/or department chair appointing the doctoral committee, approving the dissertation prospectus, and verifying the successful completion of the qualifying and comprehensive examinations and dissertation defense. Also contained in the file should be statements of proficiency in language, and/or statistics or computer science, and/or a nine (9) hour minor.

## **COLLEGE OF THE ARTS**

## Graduate Degrees 1994-1995

School/Department	Major	Degree
	Master's Level	
School of Music		
	Music	Master of Music
	Church Music Emphasis	
	Conducting Emphasis	
	History and Literature Emphasis	
	Performance Emphasis Theory and Composition Emphasis	
	Woodwind Performance and	
	Pedagogy Emphasis	
	Music Education	Master of Music
	Wasie Education	Education
Art		200000000000000000000000000000000000000
	Art Education	Master of Art
		Education
Theatre and Dance		
	Theatre	Master of Fine Arts
	Performance Emphasis	
	Design and Technical	
	Theatre Emphasis	
	Doctor's Level	
School of Music		
	Music Education	Doctor of Music Education
		Doctor of Philosophy
	Performance and	
	Pedagogy	Doctor of Musical Arts

## **COLLEGE OF THE ARTS**

Harold Luce, Dean Hattiesburg, MS 39406-5031 (601) 266-4984

The College of The Arts currently offers graduate degree programs at two levels; master's degree and doctoral degree. Descriptions of these programs can be located in the respective departmental sections.

#### **Deficiencies**

The College of The Arts retains the right to determine deficiencies in the preparation of any graduate student, regardless of the number of course credits accumulated. The College will recommend appropriate means of removing such deficiencies.

#### **Examinations and Performance Evaluations**

Some degree programs require entrance examinations and/or performance evaluations. Regular admission to any graduate program requires submission of the combined scores (Q+V) received on the **Graduate Record Examinations**. The departmental sections following in this **Bulletin** list general requirements for each degree program. Prospective students should confer with the department chair for full details. Approval of the graduate faculty in the appropriate department must be granted before a student will be accepted into a graduate degree program in any area of The Arts.

Final comprehensive examinations at or near the completion of the course work are required for all graduate degrees. The type, scope, and dates of the examinations vary, since they are matters of individual departmental policy. Each student pursuing a graduate degree should confer with his or her major professor and department chair for full particulars.

### **DEGREE PROGRAMS**

Prescribed curricula for degree programs are listed below. Some provide great latitude and flexibility in arranging individual degree programs. Course selections must be approved by the student's major professor and graduate advisory committee. The approved course of studies for master's degree students must be filed with the student's department chair prior to the student's second registration. The student's major professor will assist in every way possible, but final responsibility for following all general and departmental regulations lies with the student. Prospective doctoral students must consult with the Coordinator of Graduate Studies prior to initial registration for detailed information about general and departmental regulations.

## SCHOOL OF MUSIC

Peter Ciurczak, Director Hattiesburg, MS 39406-5081 (601) 266-5363

#### MASTER'S DEGREES

There are two master's degrees available in the School of Music, one with a major in music leading to the Master of Music degree, the other with a major in music education leading to the Master of Music Education degree. Emphasis areas in the Master of Music degree are: Performance, Church Music, Conducting, Music History and Literature, Theory and Composition, and Woodwind Performance and Pedagogy.

Regular admission procedures governing graduate entrance into The University of Southern Mississippi will be required. Details can be found in another section of this **Bulletin**.

## Admission Requirements: Master's Degrees

For regular admission to master's degree programs, a student must have (1) a B average or better on music courses in the undergraduate degree, (2) an overall grade point average of at least 3.0 (A = 4.0) on the last two years of undergraduate study, and (3) a minimum total score (quantitative plus verbal) of 850 on the General Test of the **Graduate Record Examinations**. Acceptance to the School of Music requires students to meet expectations beyond these; see "Degree Candidacy."

Students who meet the respective grade point average requirements above but are unable to meet the GRE minimums may be considered for conditional admission.

## Degree Candidacy: Master's Degrees

**Degree Candidacy:** Admission to graduate study does not imply admission to candidacy for a master's degree. A maximum of nine (9) hours of graduate work earned before one has gained admission to the School of Music can be applied toward a degree. To gain degree candidacy (i.e., admission), one must:

- a) take Diagnostic Entrance Examinations:
- b) pass a Candidacy Audition (Master of Music degrees only) during the first term of fulltime residence or before completing nine (9) hours of course work; see pages 41 through 45, this **Bulletin**;
- c) pass all Special Examinations (see specific areas in which the degree may be earned);
- d) consult with the Coordinator of Graduate Studies, have an Advisory Committee appointed, and begin planning the total degree program early in the first term of attendance. This process must be completed before nine (9) hours have been earned;
- e) complete at least nine (9) hours of graduate course work relevant to one's degree plan with a cumulative grade-point average of 3.0;
- f) complete a Degree Contract, approved by the Advisory Committee and the Coordinator of Graduate Studies, before earning nine (9) semester hours. If the Degree Contract is not on file with the Coordinator before that point, credit hours earned above nine (9) semester hours will not be counted toward the degree.

Students who have not done the above will be asked to withdraw from the graduate music program.

## Diagnostic Examinations and Auditions: Master's Degrees

Before the first term of residence, all graduate students must take diagnostic examinations in music theory and in music history and literature. Those who show proficiency in these areas must enroll in a graduate theory or history course other than MUS 620: Music Theory Survey and MUS 630: Music History Survey; for all others, MUS 620 and MUS 630 are required. A student with deficiencies may be required to take additional course work beyond the minimum required in the degree program.

Diagnostic examinations are administered on campus each Friday preceding the first day of classes in Fall, Spring, and Summer.

9:00 a.m. - Theory

10:30 a.m. - Music History and Literature

Diagnostic examinations are also administered through the mail. To make the testing process feasible, please find a proctor, preferably a teacher in a nearby college or university, to whom we can send copies of your examination. Send the name and address to Coordinator of Graduate Studies.

Entrance auditions are also required for some degrees. These are:

Master of Music in Performance

in Church Music

in Conducting

in Woodwind Performance and Pedagogy

The Master of Music in Theory and Composition and the Doctor of Musical Arts in Composition require submission of representative scores of the prospective student's compositions.

All graduate students should consult the Coordinator of Graduate Studies for current, specific policies governing the advisement of students, the presentation of recitals, and the administration of comprehensive examinations.

## **Ensemble Participation: Master's Degrees**

All full-time graduate students majoring in music and music education are required to participate in an ensemble during each term of residence. A maximum of two (2) hours of graduate credit earned in ensemble work may be counted toward a degree. The ensemble in which one participates will be determined by the student's advisory committee. Appropriate ensembles are: Orchestra, Band, Chamber Music, University Chorale, Jazz Lab Band, Collegium Musicum, Oratorio Chorus, University Singers, Chamber Singers, and Opera Theatre.

## Special Examinations and Auditions: Master's Degrees

All Special Examinations and Auditions must be passed before one can gain Degree Candidacy.

## **Comprehensive Examinations: Master's Degrees**

Comprehensive examinations are required for all master's degrees.

The test will be prepared by the student's graduate advisory committee; it will cover the area of the major field. As a general rule, the Comprehensive Examination will be written.

The major professor will schedule the Comprehensive Examination; these tests may be administered at any time during the semester, but never later than ten school days before final examination week. The Coordinator of Graduate Studies must receive results of Comprehensive Examinations in time to notify the University Registrar and the Graduate Office no later than the last day for presenting signed theses to the Graduate Office.

A student who fails the Comprehensive Examination may repeat the exam once; the test must be repeated within one year of the first Comprehensive Examination.

## **Special Problems Courses**

Special problems courses must be approved by the Music Graduate Committee. Petitions requesting permission to enroll are available in the Office of the Undergraduate and Graduate Coordinator (Fine Arts Building 210). Petitions must be submitted to the Coordinator by noon of the second day of classes.

## **Advisory Committee**

During the first term of full-time residence or before nine (9) hours of graduate credit have been earned, the student, the student's major professor, and the Coordinator of Graduate Studies select those faculty who will serve as the student's Advisory Committee.

The major professor, the Coordinator of Graduate Studies, and the student shall develop a Degree Contract. The Advisory Committee members will respond to the contract in full committee session (i.e., a full committee meeting scheduled by the Coordinator of Graduate Studies). In those cases where a student is required to take additional course work beyond the minimum required by the degree, the Advisory Committee will counsel the student and, along with the Coordinator of Graduate Studies, plan the program of studies.

This committee will submit questions for the Comprehensive Examinations; it will also administer the test and grade it.

The Advisory Committee will approve the recital repertoire, will attend the recital,\* and will grade the performance as Satisfactory (S) or Unsatisfactory (U); this grade, indicating the majority opinion of the Advisory Committee, must be recorded on the recital program and submitted to the Coordinator of Graduate Studies. Should a recital be judged Unsatisfactory by a majority of the committee, another recital, at a date determined by the Advisory Committee, must take place. Should a recital be canceled or postponed until a succeeding semester, the recital will be graded "E" (course in progress); the grade "I" (Incomplete) can be awarded, but only with permission of the School of Music Graduate Committee. Not until all required recitals have been performed and judged Satisfactory will grades received on Comprehensive Examinations be submitted to the University Registrar or to the Graduate Office.

In degree plans that provide flexibility and in those cases where a student is required to take additional course work beyond the minimum required by the degree, the Advisory Committee will counsel the student and, along with the Coordinator of Graduate Studies, plan the program of studies.

# Master of Music Degree Performance (32 hours)

## Candidacy Audition:

All students must audition for an appropriate faculty jury. Unless stipulated otherwise (i.e., Brass Performance, Percussion Performance, Piano Performance, Voice Performance), an audition tape will suffice. This audition must be deemed Satisfactory before one can be declared a candidate for the master's degree (i.e., before one completes nine (9) hours of graduate work; see Degree Candidacy). Early auditions are encouraged.

In all instances other than those in bold-face below, the audition must be at least thirty minutes in length and must include three works of contrasting style, preferably representing three different periods in music. (Repertory lists with representative works are available upon request. Write: Graduate Coordinator, School of Music, The University of Southern Mississippi, S.S. Box 5081, Hattiesburg, MS 39406-5081.)

**Brass Performance:** For those majoring in brass performance a tape will not suffice; the candidacy audition must be a full recital for the USM brass faculty.

**Percussion Performance:** For those majoring in percussion performance, the candidacy audition may be on cassette; the applicant should demonstrate proficiency on timpani and mallet keyboards and should include a multiple-percussion performance.

Piano Performance: For those majoring in piano performance, the audition must be memorized, be at least thirty minutes in length, and be performed before the piano faculty; it must include works from at least three different periods in music (e.g., Baroque, Classical, Romantic, Impressionistic, or Contemporary).

Voice Performance: An audition cassette will satisfy preliminary expectations, but before completing nine (9) hours of graduate work, the student must also sing for a faculty committee and fulfill the requirements below.

Voice performance majors must demonstrate, by audition (1) advanced vocal technique; (2) good diction in Italian, French, German, and English; and (3) good vocal quality and musicianship. The repertoire must be memorized and include (1) an aria from opera or oratorio; (2) a seventeenthor eighteenth-century Italian song or aria; (3) a German Lied; (4) a French Melodie; and (5) a song in English.

Further, the student's transcript(s) must show grades of C or better in two years of foreign language (any combination of two of the following: German, French, and Italian) and at least one course in diction for singers. Students lacking these will be required to pass these courses in addition to the requirements for the degree. In lieu of course work, satisfactory performance on language exams, administered by the USM Department of Foreign Languages and Literatures, is acceptable.

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Specific areas in which this degree may be earned are:

Bassoon Trumpet Clarinet Percussion Tuba Euphonium Piano Viola Flute Piano Accompanying Violin Violoncello Guitar Saxophone Harpsichord String Bass Voice Horn Trombone

Oboe

\*Before scheduling a recital, the student must ascertain that all members of the Advisory Committee can attend. At least fourteen days before the recital, the student should issue a written invitation to each member of his or her committee.

Music History and Literature Electives 6
(MUS 630: History Survey (3) may be required)

Music Theory Electives 6
(MUS 620: Theory Survey (3) may be required)

Literature (primary performance medium) 2

Pedagogy (primary performance medium) 8

MUS 715: Recital 3

Electives\* 5

\*May be in appropriate related fields.

## Performance-Piano Accompanying:

## Candidacy Audition:

Music Theory Electives (MUS 620: Theory Survey may be required) ......

## Master of Music Degree Church Music (32 Hours)

## Undergraduate Prerequisite:

Bachelor's degree with a major in Church Music in a program equivalent to that at The University of Southern Mississippi.

## Candidacy Audition:

Pass a piano proficiency examination comprised of simple accompaniments and hymns. Audition in one of the following major performance areas (see below):

- a) Organists must play a major work of Bach and at least one work from the 19th and one
  work from the 20th centuries. A cassette tape is acceptable.
- b) Singers must sing one oratorio aria and one of the following: German, Italian or French art song. A cassette tape is acceptable.
- c) Conductors must demonstrate conducting competency by directing an audition/ rehearsal with one of the University choral ensembles. This must be accomplished by auditioning during the initial semester of one's graduate work or by scheduling an appointment before seeking admission.

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MUS 553: Church Literature and Materials.       3         MUS 560: Administration of Church Music.       3         MUS 562: Hymnology.       3         Music History and Literature (MUS 630: History Survey (3)       6         may be required).       6         Music Theory (MUS 620: Theory Survey may be required)       6         Major Performance Area (Organ, Voice, Conducting)       7         MUS 715; Recital.       1         Electives       3
Master of Music Degree Conducting (35 Hours)
Candidacy Audition:
Demonstrate advanced conducting competency by directing an audition rehearsal with a University performing ensemble. Play a full band or orchestra score at the keyboard. (Request audition repertory list by writing to the Coordinator of Graduate Studies.)  Three years experience as a conductor and considerable experience as a member of a performing ensemble are expected. Students are encouraged to submit a video tape of their conducting.  In some cases, students with minimal deficiencies will be admitted into the program on a conditional basis and will be required to complete undergraduate courses (not for graduate credit) before proceeding as a Degree Candidate.  MUS 548 or Choral Literature I (3)
or MUS 552 Band Literature I (2)3-2 MUS 549 Choral Literature II
or MUS 550 Symphonic Literature
or       3         MUS 722 Analytical Techniques II
Applied Music
Master of Music Degree Music History and Literature (35 Hours)
Undergraduate Prerequisites:
Baccalaureate degree with a major in music and at least one course in each of the following: 16th century counterpoint, 18th century counterpoint, composition, orchestration.
Special Examination:
Demonstrate for the music history faculty the ability to translate excerpts in at least one foreign language (i.e., French, German, Italian, or Spanish) before completing nine (9) hours of graduate course work. Prior to the first registration, demonstrate writing ability by submitting a research paper, preferably in music.  MUS 702 Bibliography for Music Research

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Select from:
MUS 533 20th Century Music (3)
MUS 534 Ancient, Med., Renaissance Music (3)
MUS 535 Baroque Music (3) MUS 536 18th Century Music (3)
MUS 537 19th Century Music (3)
Prescribed Electives: Group I
Select from:
MUS 571 Seminar in Masterpieces of Music (3)
MUS 731 Performance Practices I (3) MUS 732 Performance Practices II (3)
MUS 761 Music Literature Seminar (3)
Prescribed Electives: Group II
Select from:
MUS 531 History of Opera (3)
MUS 532 American Music (3) MUS 540 Vocal Literature I (2)
MUS 541 Vocal Literature II (2)
MUS 542 Keyboard History and Literature (3)
MUS 546 Instrumental Literature I (2)
MUS 548 Choral Literature I (3)
MUS 549 Choral Literature II (3) MUS 550 Symphonic Literature (3)
MUS 551 Chamber Music (3)
MUS 559 British Studies (3-6)
MUS 698 Thesis
NOTE: Special Problems (MUS 692) may be substituted for the above with permission of the major
professor. In addition to requirements above, the major professor and the Graduate Advisory
Committee may specify that the student pass REF 601: Research: Introduction and Methodology (3)
Master of Music Degree Theory and Composition (32 Hours)
Undergraduate Prerequisite:
Completion of a bachelor's degree that included counterpoint and orchestration.
C P1 A P2
Candidacy Audition:
Take and pass a keyboard skills examination by performing selections from Schumann, R., Album for the Young, Op. 68, and Bach, J.S., 371 Four-Part Chorales. Submit, prior to the first registration, the score (and tape, if available) of a three-movement sonata, ten to fifteen minutes in length, for one or more instruments. One may send additional scores.
Advanced Composition
MUS 711 Pedagogy of Theory
MUS 721 Analytical Techniques I (3) or
MUS 722 Analytical Techniques II (3) or
MUS 723 Analytical Techniques III (3)
Applied Music
Music History and Literature Electives (MUS 630, History Survey (3), may be required)
MUS 698 Thesis
MUS 714 Composition Project
Electives (Cannot be MUS 620: Theory Survey)
Moston of Music Dognos
Master of Music Degree
Woodwind Performance and Pedagogy (32 Hours)
Candidacy Audition:
Audition for the appropriate jury (tapes are acceptable), showing performance ability on at least
two woodwind instruments: flute, oboe, clarinet, saxophone, bassoon.

Three remaining Woodwind Instruments	6
MUS 715 Recital (two recitals)	2
MED 734 Woodwind Techniques and Materials	
MUS 692 Special Problems: Woodwind Literature	2
Music History and Literature Elective (MUS 630: History Survey (3), may be required)	3
Music Theory Elective (MUS 620: Theory Survey (3), may be required)	3
Electives	

NOTE:

Selection of specific primary, secondary and minor instruments is at the option of the student in consultation with his or her Graduate Advisory Committee and with approval of the auditioning committee. Normally, the student will be expected to select a primary/secondary combination from one of the following: single reed/double reed, single reed/flute, double reed/flute. Study of the primary and secondary instruments must embrace at least two semesters. Requirements for MUS 715 under this degree program will include two recitals, each receiving one semester hour credit. These recitals may consist of one chamber music program and one solo program, or a combination of chamber and solo music within both recitals. The primary and secondary instruments must be performed in each recital; the remaining instruments must be performed at least once, with a minimum of one minor instrument represented on each program.

## Master of Music Education Degree (30 Hours)

## Undergraduate prerequisite:

#### DOCTORAL DEGREES

Three doctoral degrees are available in the School of Music: the Doctor of Music Education, the Doctor of Philosophy in Music Education, and the Doctor of Musical Arts.

Students pursuing the Doctor of Musical Arts degree do so with an emphasis in Performance and Pedagogy. Specific areas in which the D.M.A. may be earned are:

Bassoon	Oboe	Trumpet
Clarinet	Organ	Tuba
Composition	Percussion	Viola
Conducting	Piano	Violin
Euphonium	Saxophone	Violoncello
Flute	String Bass	Voice
Guitar	Trombone	

Harpsichord

Horn

### ADMISSION REQUIREMENTS

Students seeking regular admission to doctoral-level programs at The University of Southern Mississippi must have (1) a graduate grade-point average of at least 3.5 (A = 4.0) on the previously earned master's degree and (2) a minimum total score (quantitative plus verbal) of 1000 on the General Test of the Graduate Record Examinations.

Students who meet the respective grade-point average requirements above but are unable to meet GRE minimums may be considered for conditional admission. (For details concerning conditional admission, see "Admission Requirements and Procedures," **Graduate Bulletin**, The University of Southern Mississippi.)

Important Note: Acceptance into the doctoral degree programs of the School of Music requires that students meet expectations beyond those stipulated in the **Graduate Bulletin**; see "Acceptance into the School of Music." this booklet.

## **ENSEMBLE PARTICIPATION**

A maximum of two (2) hours of graduate credit earned in ensemble work may be counted toward a degree. The ensemble in which one participates will be determined by the student's Advisory Committee.

#### ACCEPTANCE INTO THE SCHOOL OF MUSIC

Acceptance: Admission to graduate study does not imply acceptance into the School of Music for doctoral-level study. A maximum of nine (9) hours of graduate work earned before one has gained admission to the School of Music can be applied towards a degree. To gain acceptance, one must:

- a) Performance and Pedagogy: possess a master's degree; Music Education: possess a
  master's degree in music education and have at least three years of successful teaching
  experience;
- b) take Diagnostic Entrance Examinations;
- pass a Candidacy Audition (D.M.A. in Performance and Pedagogy, Applied areas only)
   prior to or during the first term of full-time residence or before completing nine (9) hours of course work;
- d) pass a Candidacy Audition (D.M.A. in Performance and Pedagogy, Conducting Area only) prior to the first term of enrollment;
- e) submit and gain approval for a portfolio of one's representative scores and/or recordings
  prior to the first term of enrollment (D.M.A. in Performance and Pedagogy, Composition
  area only);
- f) pass all Entrance Examinations, D.M.A. Special Examinations (see specific areas in which the D.M.A. may be earned), and the Qualifying Examinations during the first term of enrollment.
- g) consult with the Coordinator of Graduate Studies, have a major professor and an Advisory Committee appointed, and begin planning the total degree program early in the first term of attendance or before nine (9) semester hours have been earned; this process must be completed before taking the Qualifying Examination.
- h) complete at least nine (9) hours of graduate course work relevant to one's degree plan with a cumulative grade-point average of 3.5;
- complete a Degree Planning Sheet, approved by the Advisory Committee and the Coordinator of Graduate Studies, before the beginning of the semester following the initial taking of the Qualifying Examination. If the Degree Planning Sheet is not on file with the Coordinator before the start of that semester, credit hours earned above nine (9) semester hours will not be counted toward the degree. Doctoral students should be counseled by their Advisory Committee before registering for courses.

### **EXAMINATIONS**

For description of the tests included in the Doctoral Degree Entrance Examinations, Special Examinations, Diagnostic Examinations, Comprehensive Examinations, and Candidacy Auditions, write: Coordinator of Graduate Studies, School of Music, Box 5081, The University of Southern Mississippi, Hattiesburg, MS 39406-5081.

#### DIAGNOSTIC ENTRANCE EXAMINATIONS

Before enrolling for post-Master's hours, all students must take Diagnostic Entrance Examina\ tions, one in music theory and another in music history and literature. Those who lack proficiency in one or both of these areas must enroll and pass ("C" or better) the appropriate course (i.e., MUS 620: Music Theory Survey and MUS 630: Music History Survey). Hours gained in these courses cannot be counted toward a degree.

Diagnostic Entrance Examinations are administered on campus each Friday preceding the first day of classes in Fall, Spring, and Summer.

9:00 a.m. - Theory

10:30 a.m. - Music History and Literature

These examinations are also administered through the mail. To make the testing process feasible, a proctor, preferably a teacher in a nearby college or university, may administer the examination. Submit the name and address of the proctor to the Coordinator of Graduate Studies.

Students with deficiencies may be required to take additional course work beyond the minimum required in the degree program.

### **QUALIFYING EXAMINATIONS**

All students must take the written Doctoral Qualifying Examination. This examination must be completed during the student's initial semester as a doctoral student.

The Qualifying Examination consists of three parts: (1) an area of specialization, (2) music history, and (3) music theory. (Suggestions for study are available from the Office of the Graduate Coordinator.) The Qualifying Exams are administered on Monday afternoon (Theory), Wednesday morning (Area Examination), and Thursday afternoon (History) of the first full week in November and the first full week in April. Examinations in the Summer Semester are scheduled on the three successive Saturdays following the Fourth of July holiday. The exact dates of the examinations are determined by the Graduate Coordinator and are publicized as soon as the University's Academic Calendar is available.

The tests are designed to judge the student's fitness to pursue doctoral work and to guide the Advisory Committee in planning the student's program. Generally, the Qualifying Examination is administered only once

Each part of the examination is graded by the appropriate faculty, and the results are reported to the Graduate Coordinator. Results of the individual parts of the Qualifying Examination will be reported to the Graduate Coordinator in one of three ways:

- 1. Student shows no deficiencies.
- Student shows deficiencies which are noted along with appropriate means to remove these deficiencies.
- 3. Qualifying Examination is judged unacceptable for one or both of the following reasons:

  A. Student has inadequate knowledge of the subject.
  - B. Student cannot write and/or spell adequately.

For students with deficiencies, those who grade the examinations will make recommendations regarding the courses to be taken by the doctoral candidate. Students with deficiencies may be required to take additional course work beyond the minimum required in the degree program. Further, students with deficiencies may be required to take undergraduate courses for which no credit toward the doctorate will be gained.

The results of the examination are reported to the Graduate Coordinator and to the student's Advisory Committee. Should the Advisory Committee disagree with the recommendations of the appropriate faculty, it must respond, in writing, to the Graduate Coordinator within seven days of receiving the Qualifying Examination results. Upon receiving a written response, the Graduate Coordinator will schedule a meeting of the student's Advisory Committee and all appropriate faculty. Should there be no response from the student's Advisory Committee, the recommendations of the appropriate faculty will stand.

When a student performs unacceptably on one part of the Qualifying Examination, the student's major professor and committee must meet with the appropriate faculty to determine whether the student may continue in the program. If the student is to continue, the recommendations of the area faculty regarding course work must be discussed and determined by the student's Advisory Committee and appropriate area faculty.

When the student performs unacceptably on two parts of the Qualifying Examination, he/she may not register for any more hours of course work leading to a doctor's degree. In order to continue in the program the student must retake the two parts which were unacceptable. If either part is judged unacceptable a second time, the student cannot continue in the doctoral program in

music. Deviations from the policy in this paragraph must be approved, in writing, after a meeting by both the Advisory Committee and the appropriate faculty graders.

Students are notified of the results, in writing, before the end of the semester.

The Qualifying Examination may be administered through the mail. To make the process feasible, a proctor, preferably a teacher in a nearby college or university, may administer the examination. Upon submission of the name and address of a proctor to the Coordinator of Graduate Studies, the Coordinator will see that the exams are sent to the proctor along with the appropriate instructions for administering the tests.

#### COMPREHENSIVE EXAMINATIONS

At the completion of all course work and examinations, the doctoral student is required to take a written Comprehensive Examination in the student's area of specialization, Music Theory, and Music History. The test will be prepared and graded by members of the appropriate area faculty. The results are reported to the Graduate Committee. Following a review by the Graduate Committee, the Comprehensive Examination is submitted, with a recommendation, to the Advisory Committee.

When it is determined that the Comprehensive Examination is unsatisfactory, in whole or in part, the student will be granted a second examination. The test must be repeated within one year of the first Comprehensive Examination, but the student will be required to repeat only those sections of the examination judged unsatisfactory. In those instances where a second examination is expected, the appropriate area faculty will inform the student, in writing, as to the specific or general areas which will be tested. The appropriate area faculty will grade the second test.

The Comprehensive Examination can be retaken once; all parts failed must be repeated simultaneously. If the second examination is judged unsatisfactory by the Advisory Committee, the student cannot earn a doctoral degree in Music or Music Education at The University of Southern Mississippi.

This examination is offered each semester approximately three (3) weeks before the end of the term. The exact dates are determined by the Graduate Coordinator and are publicized early in the term. Examinations in the summer semester are scheduled on three successive Saturdays following the July 4th Holiday. The Coordinator of Graduate Studies must receive the results of the Comprehensive Examination in time to notify the University Registrar and the Graduate Office (i.e., no later than the last day for presenting signed dissertations to the Graduate Office).

#### **ORAL EXAMINATIONS**

After the dissertation has been accepted and after all required course work has been completed, but at least four weeks before the candidate is scheduled to receive the degree, a final oral examination on the dissertation and related fields will be conducted by the student's advisory committee and any other faculty members designated by the Graduate Dean. The examination will be open to any member of the graduate faculty.

#### SPECIAL PROBLEMS COURSES

Special Problems courses must be approved by the Music Graduate Committee. Petitions requesting permission to enroll are available in the Office of the Graduate Coordinator (Performing Arts Center 209). Petitions must be submitted to the Coordinator by noon of the second day of classes.

#### ADVISORY COMMITTEE

Early in the first term of full-time residence or before nine (9) hours of graduate credit have been earned, the student, the student's major professor, and the Coordinator of Graduate Studies select those faculty who will serve as the student's Advisory Committee. The Advisory Committee must be appointed before one takes the Qualifying Examination.

The major professor and the student shall develop a planning sheet of course work based upon Qualifying Examination information together with course requirements. The Advisory Committee members will respond to the plan in full committee session (i.e., a full committee meeting scheduled by the Coordinator of Graduate Studies). In those cases where a student is required to take additional course work beyond the minimum required by the degree, the Advisory Committee will counsel the student and, along with the Coordinator of Graduate Studies, plan the program of studies.

If recitals are required by the student's degree plan, the Advisory Committee will approve the repertoire, will attend the recital,\* and will grade the performance as Satisfactory (S) or Unsatisfactory (U). This grade, indicating the majority opinion of the Advisory Committee, must be

recorded on the Graduate Examination Report and submitted to the Coordinator of Graduate Studies. Should a recital be judged Unsatisfactory, another recital, at a date determined by the Advisory Committee, must take place. Should a recital be canceled or postponed until a succeeding semester, the recital will be graded "E" (course in progress); the grade "I" (Incomplete) can be awarded, but only with permission of the School of Music Graduate Committee. Not until all required recitals have been performed and judged Satisfactory will grades received on Comprehensive Examinations be submitted to the University Registrar or to the Graduate Office.

\*Before scheduling a recital, the student must ascertain that all members of the Advisory Committee can attend. At least fourteen days before the recital, the student should issue a written invitation to each member of his or her committee.

#### DISSERTATION

- A. The dissertation topic must be approved by the student's major professor and Advisory Committee and must be an original and significant contribution to knowledge in the chosen field. The Human Subjects Protection Review Committee must also approve the topic.
- B. Once a topic has been approved, the student must enroll in MUS 797, MED 797, MUS 898, or MED 898 in each semester/term until the degree is completed.
- C. A separate bulletin outlining University requirements concerning the preparation of dissertations is available in the Graduate Office.
- D. Additionally, instructions specific to the development of an approved topic in Music or Music Education must be followed. These may be obtained from the Coordinator of Graduate Studies.

#### **DOCUMENTS**

The doctoral student must file a number of documents with the Graduate Office. Please see "Documents-Doctoral Degree Requirements," this **Bulletin.** 

#### DEGREE PLANS

# DOCTOR OF MUSICAL ARTS DEGREE PERFORMANCE AND PEDAGOGY (all areas except Conducting and Composition)

## Candidacy Audition\*

All students must audition for the appropriate area faculty (generally, taped auditions are not acceptable.) This audition must be deemed Satisfactory before one can be accepted into the School of Music (i.e., before completing nine (9) hours of graduate work). Early auditions are encouraged, and a high level of performance proficiency is expected.

\*In lieu of a candidacy audition, with the approval of the School of Music Graduate Committee, students who will complete the Master of Music degree in Performance at USM may use their graduate recital. The appropriate faculty must attend the recital, and the printed program must state the total purpose of the concert, e.g., "This recital is given in partial fulfillment of the requirements for the degree Master of Music in Performance, and it also serves as an audition for acceptance into the Doctor of Musical Arts curriculum in the School of Music." The student must begin doctoral study within one year of this audition.

In all instances other than those in bold-face below, the audition must be at least thirty minutes in length and must include three works of contrasting style, preferably representing three different periods in music. (Repertory lists with representative works are available upon request. Write: Graduate Coordinator, School of Music, The University of Southern Mississippi, Box 5081, Hattiesburg, MS 39406-5081).

Brass Performance: For those majoring in brass performance, the candidacy audition must be a full recital for the USM brass faculty.

**Percussion Performance:** For those majoring in percussion performance, the applicant should demonstrate proficiency on timpani, on mallet keyboards, and should perform a multiple-percussion performance.

**Piano Performance:** For those majoring in piano performance, the audition must be a full recital, memorized, performed before the piano faculty; it must include works from at least three different periods in music (e.g., Baroque, Classical, Romantic, Impressionistic, or Contemporary). The faculty may select portions from the repertoire submitted.

Voice Performance: Voice performance majors must demonstrate, by audition, (1) advanced vocal technique; (2) good diction in Italian, French, German, and English; and (3) good vocal quality and musicianship. The repertoire must be memorized and include (1) an aria from opera or oratorio; (2) a seventeenth- or eighteenth-century Italian song or aria; (3) a German Lied; (4) a French Melodie; and (5) a song in English.

**Special requirement, Voice Performance:** The student's transcript(s) must show grades of C or better in at least one course in diction for singers and in two years of foreign language: German, French, or Italian (may include any combination of those languages). Students lacking these will be required to pass such courses in addition to the requirements for the degree. In lieu of course work, satisfactory performance on language exams, administered by the USM Department of Foreign Languages and Literatures, is acceptable.

## All D.M.A. Areas Except Conducting and Composition

The D.M.A. student will be required to take MUS 702, 731, 732, and 898. Students who will write a dissertation are advised to enroll in MED 825, Doctoral Seminar in Music Education. The remainder of the course work will be determined in light of the student's qualifying examination, entrance audition, his or her interests and/or professional goals, and the counsel of the major professor and graduate advisory committee. In planning this program, the following minimum distribution of graduate courses (including master's degree work) is required: Thirty (30) semester hours in performance music studio study and recitals, fifteen (15) semester hours in music history and literature, nine (9) semester hours in music theory, and the remainder of the program in approved electives which may include six (6) semester hours in a cognate field of study. Three recitals will be required in addition to the entrance audition. One must be a solo recital, one a lecture recital, and the third chosen from the following options: (a) performance of a concerto with orchestra, (b) performance of a major role in an opera, (c) performance of a major role in an oratorio, (d) a full-length recital of chamber music, or (e) a second solo recital. (Note: To use options "a" through "d," permission of the student's Advisory Committee must be received before the semester in which the event will occur.) As a general rule, not more than one doctoral recital may be presented by a candidate during any academic term, nor more than two during any ninemonth period. Rare exceptions will be permitted, but under rigidly controlled procedures. See the Coordinator of Graduate Studies for details.

One language will be required in the degree. Others may be required by the major professor and Graduate Advisory Committee.

The D.M.A. dissertation, required for completion of the degree, consists of two parts. Part I must be a written thesis giving evidence of the candidate's ability to make a scholarly investigation of limited scope. Part II must include all recital programs, concert programs, and program notes presented during the student's residency.

### **Conducting Area**

Acceptance of a prospective student into the D.M.A. program in the conducting area requires a previously earned master's degree in music or music education. The conducting faculty must be satisfied that the student is qualified to pursue the D.M.A. at The University of Southern Mississippi.

Students applying for entrance into the D.M.A. program in the conducting area must:

- a) provide an application that includes a current resume; a repertoire list, specifying works conducted in performance; three letters of recommendation which center on the applicant's conducting abilities; a video tape of a rehearsal conducted by the applicant; and a video or audio tape of a performance conducted by the applicant.
- b) complete an interview and an audition. After review of the application by the conducting faculty, the applicant may be invited to an interview-audition on campus. It will include 1) a session with the conducting faculty to assess one's musical proficiencies and 2) a rehearsal of an appropriate university ensemble to assess one's rehearsal technique.

In the interview, the applicant will demonstrate the following:

- a) musicality, preferably by showing proficiency as a performer on a standard orchestral or band instrument, on a standard keyboard instrument, or as a singer;
- b) keyboard proficiency above the basic level in technique, musicianship, and open score reading;
- c) a high degree of competence in ear-training and sight-singing;
- d) thorough knowledge of the traditional orchestral and band instruments and their transpositions;
- e) acquaintance with a broad range of appropriate repertoire from various periods;
- f) detailed knowledge of works from the applicant's repertoire list.

The audition, a rehearsal, will use repertoire selected in consultation with the appropriate faculty and will last for approximately thirty minutes. The applicant's competence in effective gestural and verbal communication will be assessed. For applicants admitted to the program with deficiencies in any of the above, no degree credit will be granted for any required remedial work.

The D.M.A. student will be required to take MUS 702, 731, 732, and 898. Also required are MED 731, 732, 733, 825, and MUP 896, 897. The remainder of the course work will be determined in light of the student's qualifying examination, entrance interview-audition, interests and/or professional goals, and the counsel of the major professor and graduate advisory committee. In planning this program, the following minimum distribution of graduate courses (including master's degree work) is required: thirty (30) semester hours in performance, conducting, and recitals, fifteen (15) semester hours in music history and literature, nine (9) semester hours in music theory, MED 825 and six (6) hours of approved electives which may include a cognate field of study (a course in foundations of music education is recommended).

**Recitals:** Two concerts and a lecture recital will be required. Repertoire for these concerts must be approved in advance by the student's Advisory Committee. When practical, the repertoire will include works for both vocal and instrumental components. As a general rule, not more than one doctoral concert/recital may be presented by a candidate during any semester nor more than two during any nine-month period. Rare exceptions will be permitted, but only under rigidly controlled procedures. See your advisory committee for details.

Satisfactory competence in English and German, French or Italian is required for candidacy. Competence in a foreign language can be demonstrated by:

- a) completing three semesters of an undergraduate-level language course with a grade of B or higher;
- b) completing two semesters of a graduate-level course in German or French in reading for research with a grade of C or higher;
- c) attaining a score of 460 or higher on the GSLFT exam in an appropriate language.

Note: Credit for graduate courses in foreign languages will not be granted toward the degree.

The D.M.A. dissertation, required for completion of the degree, consists of two parts. Part I must be a written thesis that is an original and significant contribution to the knowledge of the field; it must give evidence of the candidate's ability to make a scholarly investigation of limited scope. Part II must include all recital programs, concert programs, and program notes presented during the student's residency.

#### **Composition Area**

Acceptance of a prospective student into the D.M.A. program in the composition area assumes a previously earned master's degree in composition or the equivalent, provided the composition faculty is satisfied that the student is qualified to pursue the D.M.A. at The University of Southern Mississippi. A high level of proficiency in composition and extensive knowledge of literature are expected.

Students applying for entrance into the D.M.A. program in the composition area must submit a portfolio containing representative scores and/or recordings of their compositions prior to the first term of enrollment at The University of Southern Mississippi. Additionally, the student will be required to take qualifying examinations prior to or during the first term of enrollment.

The D.M.A. student will be required to take MUS 702, 731, 732, and 898. The remainder of the program will be determined in the light of the student's portfolio evaluation, his or her qualifying examination, his or her interests and/or professional goals, and the counsel of the major professor and graduate advisory committee. In planning this program, the following minimum distribution of graduate courses (including master's degree work) is required: Thirty-nine (39) semester hours in composition and music theory, fifteen (15) semester hours in music history and literature, six (6) semester hours in a related field of study, and the remainder of the program in approved electives.

The student will write compositions totaling at least two (2) hours performing time. Up to thirty (30) minutes previously written compositions may be accepted as part of these two hours. Compositions will be for orchestra, band, chorus, ensembles, and soloists demonstrating competence in writing for all orchestral and band instruments as well as for the solo voice. The music should encompass levels of difficulty from junior high school to professional standards. The composer will write commentaries for each work, including program notes and rehearsal suggestions. All works, including parts, must be in duplicative format.

One recital of the composer's works will be given, with the composer commenting on each composition.

One language will be required, chosen from French, German, or Italian.

The D.M.A. dissertation, required for completion of the degree, will consist of the commentaries, program notes, and a full score of a work composed during the student's doctoral study.

## **Doctor of Music Education Degree**

## **Doctor of Philosophy in Music Education Degree**

General requirements for the Doctor of Philosophy and Doctor of Music Education (the Doctor of Music Education general requirements are the same as the Doctor of Education degree) are found in another section of this **Bulletin.** The College of The Arts further stipulates the following requirements.

Admission: See "Admission Requirements" and "Acceptance," a, b, e, f, g, and h.

Research Tools: Candidates for the Doctor of Philosophy degree in Music Education must comply with the language requirements as specified for Doctor of Philosophy candidates in this Bulletin. A candidate for the Doctor of Music Education degree is required to demonstrate proficiency in statistics or computer science; at the discretion of the student's Graduate Advisory Committee, the candidate may be required to demonstrate a reading knowledge of one modern foreign language.

## **Degree Requirements**

The following courses are required: REF 601 (or equivalent), MUS 702 (or equivalent), MED 750, 825, 826, and 898. The remaining course work will be determined by the candidate's Qualifying Examination, his or her interests, and the counsel of the major professor and Graduate Advisory Committee. In planning this program, the following minimum distribution of graduate courses (including master's degree work) is required: Thirty (30) semester hours in music education, nine (9) semester hours in music history and literature, nine (9) semester hours in music theory, nine (9) semester hours in professional education, three (3) semesters in studio performance study, and the remainder of the program in approved electives. Although this **Bulletin** states that eighty-four (84) semester hours are required for doctoral degrees, it should be clearly understood that some candidates will be unable to receive a degree on the basis of this minimum. The distinction implied by the degree and the traditions related to it require comprehensive knowledge and demonstration of a high degree of proficiency in the major field and related areas of study as well as the ability to conduct advanced research.

#### DEPARTMENT OF ART

Jerry Walden, Chair Hattiesburg, MS 39406-5033 (601) 266-4972

The Department of Art offers a program leading to the Master of Art Education degree. Regular admission to the program requires a minimum undergraduate grade-point average of 3.0 in the applicant's major field of art study as well as a minimum combined score of 900 on the **Graduate Record Examination** (verbal and quantitative sections). Other requirements unique to the degree program are described below. The University of Southern Mississippi Department of Art is a fully accredited institutional member of the National Association of Schools of Art and Design (NASAD).

## **Master of Art Education Degree**

Undergraduate prerequisites for the Master of Art Education degree in the Department of Art are: (1) completion of a bachelor's degree in art education at The University of Southern Mississippi or an equivalent program, or (2) completion of any degree in the visual arts, or (3) satisfaction of Mississippi Class A teacher certification requirements in art.

Each student must demonstrate a studio proficiency appropriate to previous study by presenting a portfolio for review by the graduate faculty and the chair of the Department of Art. The portfolio should be submitted no later than one calendar month prior to the initial semester of application. Deficiencies which are identified may be removed with the successful completion of the non-degree credit courses ARE 600 and/or ART 600 with a grade of no lower than B and/or taking undergraduate course work as prescribed by the student's major professor and graduate advisory committee.

There are two tracks for the Master of Art Education degree. Track 1 is for students who wish to pursue a practice-oriented degree with 18 semester hours in art studio courses; Track 2 is designed for students who prefer a research-oriented degree with certification which includes 9 semester hours in studio work, a six-hour thesis, and six hours of research courses. Both tracks require 36 semester hours for the degree. Track 1 would require an additional six hours of research courses if certification is desired.

## Requirements for a Master of Art Education Degree are as follows:

#### TRACK 1 (PRACTICE-ORIENTED)

- 9 hours of Art Education (ARE 601, 603, 606).
- hours of Art Studio (Two three-course sequences will be selected from drawing (ART 601, 602, 603), painting (ART 621, 622, 623), ceramics (ART 651 which is repeatable), and sculpture (ART 652 which is repeatable).
- 9 hours in Art History (Elect from ART 500, 531, 532, 533, 534, 535, 536, 598).
- total hours (42, if option is chosen to take REF 601, 607 in order to acquire state certification).

#### TRACK 2 (RESEARCH-ORIENTED)

- 12 hours of Art Education (ARE 601, 603, 606, 626).
- 9 hours of Art Studio (one three-course sequence will be selected from drawing (ART 601, 602, 603), painting (ART 621, 622, 623), ceramics (ART 651 which is repeatable), and sculpture (ART 652 which is repeatable).
- 6 hours of Art Education Thesis (ARE 698).
- 3 hours of Art History (Elect from ART 500, 531, 532, 533, 534, 535, 536, 598).
- 6 hours of Research and Foundations (REF 601, 607).
- 36 total hours

Candidates in Track 1 must culminate their studies with an exhibition indicating achievements within their specialized studio areas. Candidates in Track 2, in addition to the written thesis, may elect to exhibit work from their specialized area of study.

It is incumbent upon the student to know and understand all University and departmental requirements for admission, continuance, and graduation, including scholarships and assistantships.

### DEPARTMENT OF THEATRE AND DANCE

George Crook, Chair Hattiesburg, MS 39406-5052 (601) 266-4994

The University of Southern Mississippi Department of Theatre and Dance is an accredited member of the National Association of Schools of Theatre. Theatre requirements are in accordance with the published regulations of this Association.

The Department of Theatre and Dance offers programs leading to the Master of Fine Arts degree.

To be eligible for admission, a student must have completed a minimum of twenty-one (21) semester hours of undergraduate course work in theatre or theatre related areas. Those who do not meet the minimum entrance requirements may be admitted but will be expected to take undergraduate courses to cover deficiencies. It should be emphasized that admission to the Graduate School does not imply acceptance of the student as a candidate for a graduate degree. (See general admission requirements and procedures as set forth in this **Bulletin**.)

Upon being admitted into a graduate program, the student will be assisted by the department graduate coordinator in selecting an appropriate graduate advisory committee composed of three faculty members, one of whom will serve as major professor.

Before the end of the first week of classes, an entrance interview and audition/ portfolio review is required of all students entering a master's program.

## **Master of Fine Arts Degree in Theatre**

The objective of the Master of Fine Arts curriculum is to develop the educated performer by offering sound theory and intensive practical training simultaneously. Students in the Master of Fine Arts programs will elect a plan of study with specialization(s) in one or two of the following areas: Performance, and Design and Technical Theatre.

Regular admission to a Master of Fine Arts program requires: (1) submission of the combined scores (850) (QV) received on the **Graduate Record Examinations**; (2) a grade point average of at least 3.0 in the undergraduate major area; and (3) acceptable performance auditions or portfolio evaluations. Directing and acting students will be required to demonstrate their proficiency in "Showcase" performance during the first semester in residence. Design emphasis students must present a portfolio for review by the faculty prior to the initial registration. If no portfolio is available, a student may be admitted on a conditional basis until an acceptable minimum proficiency is determined.

Proficiency reviews will be required of all M.F.A. candidates at the conclusion of their second semester in residence.

The Master of Fine Arts program requires six semesters of full-time graduate study and the completion of a minimum approved program of sixty (60) hours. It is recommended that the M.F.A. student fulfill at least one of the required semesters by enrollment in the Repertory Theatre program. The candidate will satisfactorily complete a creative project in his major area of emphasis and defend it orally before the Theatre Arts faculty.

## **COLLEGE OF BUSINESS ADMINISTRATION**

Graduate Degrees 1994-1995

School	Major	Degree
	Business Administration	Master of Business Administration
School of Professional Accountancy	Accounting	Master of Professional Accountancy

## COLLEGE OF BUSINESS ADMINISTRATION

Tyrone Black, Dean William A. Sirmon, Associate Dean Hattiesburg, MS 39406-5021 (601) 266-4659

Eric Reidenbach, M.B.A. Director Hattiesburg, MS 39406-5094

(601) 266-4653

Gus Gordan, M.P.A. Coordinator Hattiesburg, MS 39406-5178

(601) 266-4641

Brooks Smith, P.M.B.A. Coordinator Long Beach, MS 39560-5128

(601) 865-4505

Mary P. Schlottman, Assistant to the Dean, Academic Programs
Hattiesburg, MS 39406-5096
(601) 266-4663

#### MISSION

The College of Business Administration at The University of Southern Mississippi is committed to providing educational programs that enhance the effectiveness of organizations operating regionally, nationally, and internationally from the state of Mississippi and the surrounding region. Toward this end, we strive to develop broadly educated future business leaders who have good communication and critical thinking skills, technical competence, grounding in ethical decision-making, and values compatible with long-term personal career development.

The College fulfills its mission primarily through its commitment to high-quality classroom instruction. Excellent teaching is best assured through a relatively balanced agenda that incorporates scholarly activity and professional service, which together help keep our instruction current, dynamic, and relevant.

#### GRADUATE DEGREE PROGRAMS

The following graduate degree programs are available on the Hattiesburg campus: a Master of Business Administration (M.B.A.) and a Master of Professional Accountancy (M.P.A.). These and other business programs offered on the Hattiesburg campus are accredited by the American Assembly of Collegiate Schools of Business.

Requests for application forms and other information may be addressed to Assistant to the Dean, Academic Programs, College of Business Administration, The University of Southern Mississippi, Box 5096, Hattiesburg, MS 39406-5096. Telephone inquiries may be made by calling (601) 266-4663.

A Professional Master of Business Administration (P.M.B.A.) is offered on the Gulf Coast. The P.M.B.A. is similar to the M.B.A. but is tailored to satisfy the needs of part-time students. Requests for application forms and other information may be addressed as indicated above. Telephone inquiries can also be made by calling (601) 266-4663 or (601) 865-4505 at Gulf Park.

Graduate assistantships are available for the M.B.A., M.P.A., and P.M.B.A. degrees. Students with good undergraduate records are encouraged to apply at the time they request admission.

#### ADMISSION STANDARDS

Admission to The University of Southern Mississippi's M.B.A., M.P.A., and P.M.B.A. programs is selective. Regular admission is normally contingent on having graduated from a college or university accredited by a recognized regional accrediting agency. In addition, the graduate admission committees of the College of Business Administration recommend admittance only for those applicants whose academic background, work experience, demonstrated leadership, and communication skills meet the challenging demands of graduate programs in management and accounting.

In evaluating applications, the admission committees utilize the following criteria:

**Undergraduate record**—The cumulative grade point average (GPA) from all institutions, the area(s) of concentration, the balance of verbal/communication and quantitative/analytical courses, and the trend of grades are considered. Recently, students beginning our programs have had an average GPA of 3.00.

**Graduate Management Admission Test (GMAT)**—The GMAT is sponsored and directed by the Graduate Management Admission Council, consisting of representatives from graduate schools of management. A candidate should strive to achieve a good balance of verbal- and quantitative-area scores. Recently, students beginning our programs have had an average GMAT of 510.

Undergraduate Record/GMAT Score Combination—Recent admissions have averaged approximately 1,100 on the formula: junior/senior-level GPA x 200 plus the GMAT score. Applicants with a low GPA, GMAT, and/or GPA/GMAT score combination must demonstrate high promise of success as indicated by one or more of the remaining admission criteria categories.

Test of English as a Foreign Language (TOEFL)—Students whose native language is not

English must achieve a TOEFL score of 550 or more.

**Work Experience**—While work experience is not required for admission, two or more years of relevant managerial responsibility strengthen the likelihood of admission to the program. Applicants are encouraged to submit resumes showing job responsibilities and accomplishments.

**Letters of Recommendation**—The admission committees review letters of recommendation to gain a more personal understanding of the applicant's leadership ability in terms of communication and interpersonal skills. Each applicant should request two recommendation letters, at least one of which addresses the applicant's academic preparation.

Essay—The essay requirement provides the applicant an opportunity to demonstrate writing competency and communication skills. It also enables the applicant to provide specific examples of demonstrated leadership, to discuss career plans, and to supply additional information that will assist in selecting those individuals who can most benefit from and contribute to the graduate management or accounting programs.

Students may enroll in College of Business Administration courses reserved exclusively for graduate students if they have regular admission to specific USM graduate programs and have taken the necessary prerequisites. In rare cases, students may be admitted conditionally. Such students must make grades of B or better on the first nine hours of graduate course work taken in order to qualify for regular admission.

Students transferring from other graduate schools must meet the admission requirements stated above. At the time of admission, transfer students may request that up to six (6) semester hours of approved credit be applied toward degree requirements. Once enrolled, transfer of credit between the Hattiesburg and the Gulf Coast campuses, as well as courses taken at other institutions, must be approved in advance.

A fee of \$20.00 must accompany all applications.

#### **ACADEMIC POLICIES**

Application of credits and dismissal—Students may not apply hours toward a degree for courses in which there is a grade of "D"; students who receive grades of "D" in more than six hours of course work will be dismissed from the program. Students who receive grades of "F" in more than three hours of course work will be dismissed from the program. Upon approval by the Dean, students may repeat one and only one course to improve a cumulative grade point average. Students whose cumulative grade point average falls below 3.0 may be dismissed from the program subject to review by a faculty committee and the Dean.

**Graduation requirements**—Students must complete course requirements with a B average for all graduate courses taken. In addition, all general requirements of the Graduate School must be met.

## **DEGREE REQUIREMENTS**

#### **Master of Business Administration**

The M.B.A. program is available to students who have no previous course work in business administration, as well as anyone whose background includes an undergraduate degree in a business discipline. Consequently, required M.B.A. course work ranges from a minimum of 34.5 semester hours to a maximum of 61.5 semester hours. Specific degree requirements will be determined upon admission. Pre-program proficiency requirements include the ability to make use of word processing, spreadsheet, and database management software packages, as well as mathematical competence through applied calculus.

The M.B.A. program is broad in nature and aimed at developing managerial competence from a general perspective. Specifically, the M.B.A. curriculum:

- strengthens critical thinking skills that involve the ability to structure and analyze problems creatively and to process data to yield useful information;
- fosters thinking that is global in scope and integrative of the economic, technical, politicallegal, and social-cultural dimensions;
- provides pragmatic managerial decision-making skills through instruction in the fundamentals of the functional areas of business (accounting, financial analysis, etc.);
- develops skills in dealing with behavioral issues including the ability to function effectively as a decision maker, motivator, and leader;
- increases awareness of and appreciation for ethical values, human dignity, cultural diversity, social responsibilities, and the need for continuous self-development;
- develops the ability to think strategically and to function effectively in an environment of rapid change;
- · enhances written and oral communication skills.

#### Foundation course requirements are as follows:

MBA 500	3 hours	MBA 550	3 hours
MBA 511	3	MBA 560	3
MBA 520	3	MBA 570	3
MBA 530	3	MBA 580	3
MBA 546	1.5	MBA 585	1.5

(Total foundation course work: 27 hours)

NOTE: The foregoing foundation course requirements will normally be waived for students who have undergraduate degrees in business.

#### Advanced course requirements are as follows:

MBA 545	1.5 hours	MBA 640	3 hours
MBA 600	3	MBA 650	3
MBA 605	3	MBA 660	3
MBA 610	3	MBA 685	1.5
MBA 620	3	MBA 686	1.5
MBA 630	3	MBA ELECTIVES	6

(Total advanced course work: 34.5 hours)

Students will begin the M.B.A. program in the fall semester only. In some cases pre-program courses should be taken prior to enrolling in M.B.A. classes.

#### **Professional Master of Business Administration**

The P.M.B.A. program is similar to the M.B.A. degree but is offered on the Gulf Coast for primarily part-time students. P.M.B.A. students who have undergraduate business degrees can normally complete the program in two years, while other students usually will need three years to meet degree requirements. Most other aspects of the P.M.B.A. parallel the M.B.A. requirements discussed in the previous section. However, unlike the M.B.A. program, students can begin the P.M.B.A. program any semester.

## SCHOOL OF PROFESSIONAL ACCOUNTANCY

James R. Crockett, Director Hattiesburg, MS 39406-5178 (601) 266-4641

The School of Professional Accountancy is a school within the College of Business Administration. Emphasis is placed on the preparation for professional careers in both the public accounting and management accounting areas.

The objective of the graduate curriculum is to provide more depth and breadth in Accounting and related subjects than can be accomplished in a four-year program. Enrollment in the School's graduate program is limited to those students who show a high probability of success.

The School offers one degree—the Master of Professional Accountancy. The program leading to the M.P.A. is essentially the culmination of a five-year program. A student who earns the Bachelor's degree with a major in one of the accounting options may normally complete the M.P.A. program with one year's additional work. A minimum of thirty (30) hours of graduate work is required.

Students with a variety of educational backgrounds may enter the program. Students who have a baccalaureate degree from an accredited college or university must either transfer or take the following business environment and tool courses:

Applied Calculus for Business (3 hours)
Principles of Economics (6 hours)
Managerial Statistics I (3 hours)
Managerial Statistics II (3 hours)
Management for Organizations
(3 hours)

Legal Environment of Business (3 hours)

The following lower-division accounting courses are also required:
Principles of Accounting (3 hours)

Accounting Processes and Systems (3 hours)

Income
Intermediate Accounting (6 hours)

Advanced Accounting (3 hours)

Accounting (3 hours)

Principles of Marketing (3 hours) equired:
Cost Accounting (3 hours)
Income Tax Accounting (3 hours)
Government and Not-for-Profit

Advanced Business Law (3 hours)

Principles of Finance (3 hours)

Global Managerial Policy and

Strategy (3 hours)

Systems (3 hours)

Accounting (3 hours)

Management Information

Professional-level courses for M.P.A.:

ACC 502 - Advanced Accounting II

ACC 512 - Seminar on Contemporary Accounting Topics ACC 605 - Current Accounting Theory and Research

ACC 610 - Advanced Auditing

ACC 620 - Advanced Cost/Managerial Accounting

ACC 630 - Tax Seminar I

ACC 631 - Tax Seminar II OR ACC 660 - Controllership

MBA 545 - Communication Skills for Managers

MBA 640 - Problems in Corporate Finance

MBA 6XX - Any 600-level MBA course

MBA 6XX - Any 600-level MBA course

A minimum of ten (10) courses must be taken at the graduate level with at least seven (7) courses numbered over 600 and at least three (3) MBA courses.

### Admission to the Program

Admission requirements for the M.P.A. program are the same as those listed for the M.B.A. program. Admission forms and GMAT applications are available in the Academic Programs Office. A fee of \$20.00 must accompany all applications.

#### **Graduation and Retention Standards**

Graduation and retention standards for the M.P.A. program are the same as those listed above for the M.B.A. program.

## COLLEGE OF EDUCATION AND PSYCHOLOGY

## Graduate Degrees 1994-1995

Department	Major	Degree
	Master's Level	,
Curriculum and Instruction		
	Educational Curriculum	Master of Education
	and Instruction	Master of Science
	Early Childhood	
	Education (MED) Emphasis	
	Elementary Education (MED) Empha	asis
	Reading (MED) Emphasis	
	Secondary Education (MED) Empha	sis
	Reading (MS) Emphasis	
	Secondary Education (MS) Emphasis	3
Educational Leadership		
and Research		
	Adult Education	Master of Education
	Educational Administration and	Master of Education
	Supervision	
	Supervision of Instruction	
	Emphasis	
Psychology		
	Psychology	Master of Arts
	Counseling and Personnel Services	Master of Education
	College Counseling/	
	Personnel Emphasis	
	School Counseling Emphasis	
	Counseling Psychology	Master of Science
	Psychology	
Special Education		
	Special Education	Master of Education
	Emotionally Disturbed Emphasis	
	Gifted Emphasis	
	Mentally Retarded Emphasis	
	Specific Learning Disabilities Empha	asis
Technology Education		
	Business Technology Education	Master of Science
	Technical & Occupational Education	Master of Science

Department	Major	Degree
	Specialist's Level	
Curriculum and		
Instruction		
	Education (CUI/EDS)	Specialist in Education
	Early Childhood	
	Education Emphasis	
	Elementary Education Emphasis	
	Reading Emphasis	
	Secondary Education Emphasis	
Educational Leadership		
and Research		
	Education (ELR/EDS)	Specialist in Education
	Adult Education Emphasis	
	Administration of Occupational	
	Education Emphasis	
	Curriculum and Supervision Emp	ohasis
	Educational Research Emphasis	
	Elementary Administration Emph	nasis
	General Administration Emphasis	s
	Higher Education Administration	Emphasis
	School Business Management En	nphasis
	Secondary Administration Empha	asis
Psychology		
	Education (PSY/EDS)	Specialist in Education
	Counseling and Guidance Emphasis	7 7
Special Education		
	Education (SPE/EDS)	Specialist in Education
	Special Education Emphasis	

Department	Major	Degree
	Doctoral Level	
Curriculum and		
Instruction		
	Education (CUI)	Doctor of Education
		Doctor of Philosophy
	Elementary Education Emphasis	
	Secondary Education Emphasis	
Educational Leadership		
and Research		
	Education (ADE)	Doctor of Education
		Doctor of Philosophy
	Adult Education Emphasis	
	Education (EDA)	Doctor of Education
		Doctor of Philosophy
	Education Administration and	
	Supervision Emphasis	
	Higher Education	
	Administration Emphasis	
Psychology		
	Counseling Psychology	Doctor of Philosophy
	Psychology	Doctor of Philosophy
	Clinical Emphasis	
	General-Experimental Emphasis	
	Industrial/Organizational Emphasi	IS
Consist Education	School Emphasis	
Special Education	Education (SDE)	Doctor of Education
	Education (SPE)	
	Special Education Emphasis	Doctor of Philosophy
	Special Education Emphasis	

## DEPARTMENT OF TECHNOLOGY EDUCATION

William B. Burns, Chair Hattiesburg MS 39406-5036 (601) 266-4446

The Department of Technology Education offers graduate programs leading to the Master of Science degree in two academic disciplines: Business Technology Education (formerly Business Education) and Technical and Occupational Education (formerly Industrial and Vocational Education). The purposes of these two programs are to provide teachers of Business, Industrial, Technical, and Vocational subjects post-baccalaureate work designed to serve as a foundation for professional development, career advancement, and further graduate study.

Teachers completing the master's degree programs qualify for the appropriate AA teaching certificate in the State of Mississippi. Separate course clusters offer a certification path for Coordinators of Cooperative Vocational Education programs. The latter group would include Coordinators of Diversified Occupations (D.O. Co-Op).

## MASTER'S PROGRAMS Admission Requirements

To be considered for regular admission to the master's degree programs, an applicant must (a) have a minimum grade point average of 2.75 on the last two years of undergraduate education; (b) present a total score of at least 850 on the Aptitude Test (verbal plus quantitative) of the **Graduate Record Examinations**, or a total score of at least 1125 on the common and area examinations of the **National Teacher Examinations** (NTE), or a total score of at least 1965 for the three tests (Communication Skills, General Knowledge, and Professional Knowledge) of the Core Battery of the NTE, or a minimum score of 39 on the **Miller Analogies Test**; and (c) have the approval of the department chair, Dean of the College, and Dean of the Graduate School.

An applicant who fails to meet the criteria for regular admission may be considered for conditional admission if he or she (a) meets one of the standardized test score requirements for regular admission and has a grade point average of at least 2.50 for the last two years of undergraduate study or, when the standardized test score is below that required for regular admission, has a grade point average of 2.75 or higher for the last two years of undergraduate study and shows promise of successfully completing degree requirements; and (b) has the approval of the department chair, Dean of the College, and Dean of the Graduate School.

The appropriate master's degree will be conferred upon candidates who (1) meet the admission requirements listed above, (2) complete the special curriculum requirements outlined below, and (3) pass the Master's program comprehensive examination.

# Master of Science Degree in Technical and Occupational Education

All students pursuing a major in Technical and Occupational Education must complete the following requirements:

Electives—Twelve (12) semester hours. Subject to the approval of the student's advisor and/or department chair, electives hours are to be taken as follows:

- 1. Three (3) semester hours must be taken in Technical and Occupational Education.
- 2. The remaining nine (9) semester hours may be selected to structure a graduate minor, or to cluster courses in support of specific certification requirements or other professional goals.

## Master of Science Degree in **Business Technology Education**

All students pursuing an emphasis in Business Technology Education must complete the following requirements:

Hours BTE 651, 652, 653, 669 ..... REF 601, 607..... Electives—Twelve (12) semester hours. Subject to he approval of the student's advisor and/or department chair, elective hours are to be taken as follows: 1. Three (3) semester hours must be taken in Business Technology Education.

2. The remaining nine (9) semester hours may be selected to structure a graduate minor, or to cluster courses in support of specific certification requirements or other professional goals.

## **CURRICULUM FOR COORDINATORS OF** COOPERATIVE VOCATIONAL EDUCATION

## (Includes D.O. Co-Op)

Prerequisite: Standard certificate in Industrial Arts/Technology Education, Trade and Technical Education, Business Technology Education, Vocational Home Economics or Vocational Agriculture.

## **Add-On AA Certification Requirement**

Six (6) semester hours as follows:

	Hours
BTE or TOE 553 Techniques/Problems of Coordination	3
TOE 533 Curriculum Construction for Cooperative Ed	3
OR	

A Master of Science Degree in Technical and Occupational Education or Business Technology Education which includes the above six (6) hours in lieu of "electives."

## DEPARTMENT OF CURRICULUM AND INSTRUCTION

Mildred E. Kersh, Chair Hattiesburg, MS 39406-5057 (601) 266-4547

The Department of Curriculum and Instruction includes the areas of elementary education, early childhood education, reading, and secondary education. The department offers the following graduate degrees, majors, emphasis areas, and specialization areas:

#### MASTER OF EDUCATION

#### Major

**Educational Curriculum and Instruction** 

**Emphasis Areas** 

Early Childhood Education

**Elementary Education** 

Reading

Secondary Education

Specialization Areas (Secondary)

Art Music Education Physical Education **Biology** 

Physics Chemistry English Science

Foreign Language Social Studies

Mathematics Speech Communication

#### MASTER OF SCIENCE

#### Major

Educational Curriculum and Instruction

**Emphasis Areas** 

Reading

Secondary Education

Specialization Areas (Secondary)

See areas under Master of Education/Specialization Area

(Secondary).

#### SPECIALIST IN EDUCATION

Major Education

**Emphasis Areas** 

Early Childhood Education Elementary Education

Secondary Education

Specialization Areas (Secondary)

See areas under Master of Education/Specialization Areas

(Secondary), excluding Foreign Language.

Reading

## DOCTOR OF EDUCATION AND DOCTOR OF PHILOSOPHY

Major Education

**Emphasis Areas** 

Elementary Education

Specialization Areas (Elementary)

Early Childhood Education

Reading

Secondary Education

Specialization Areas (Secondary)

Biology Reading Chemistry Science

English Social Studies

Mathematics

Students seeking graduate degrees in Curriculum and Instruction should be aware that certification at advanced levels in Mississippi is contingent on satisfaction of all lower level certification requirements. Students entering the Curriculum and Instruction Master's program, who desire AA level Mississippi certification in a given area must meet all A level requirements for that area. Individuals who are matriculating at USM from out of state should become aware of the certification requirements of those states where they wish to be certified and should work with an adviser to see that those requirements are met. Certification and degree requirements are separate procedures. A degree from USM in a given curricular area does not automatically insure Mississippi certification in that area or at that level.

The Department of Curriculum and Instruction strongly recommends that a student gain one year of teaching experience before completing the master's degree program. No student will be eligible to receive a specialist's degree or a doctoral degree until he or she has completed at least two years of teaching experience.

#### MASTER'S PROGRAMS

The Department of Curriculum and Instruction offers a Master of Education degree with a major in educational curriculum and instruction with emphasis areas in early childhood education, elementary education, reading, and secondary education. The Master of Science degree is offered with a major in educational curriculum and instruction with emphasis areas in reading and in secondary education.

The program of study at the master's degree level is designed to increase the professional competency of the classroom teacher and to provide the course work necessary to meet standards of teaching certification at this advanced level.

The master's degree program requires admission to a particular program, appointment of a

graduate adviser, completion and submission of four copies of the application form for a master's degree at least one semester in advance of the date of graduation, successful completion of the comprehensive examination, and completion of all course work requirements.

## **ADMISSION REQUIREMENTS**

To be considered for **regular admission** to a master's degree program, an applicant must have (a) a grade point average of at least 3.0 (figured on a scale where A equals 4.0) for the last two years of undergraduate study; (b) a total score of at least 900 on the Aptitude Test (verbal plus quantitative) of the **Graduate Record Examinations** (GRE), or a total score of at least 1965 for the three tests (Communication Skills, General Knowledge, and Professional Knowledge) of the Core Battery of the **National Teacher Examinations** (NTE), or a score of at least 39 on the **Miller Analogies Test** (MAT); and (c) the approval of the chair of the department, the Dean of the College, and the Dean of the Graduate School.

An applicant who fails to meet the criteria for regular admission may be considered for conditional admission if he or she (a) meets one of the standardized test score requirements for regular admission and has a grade point average of at least 2.75 for the last two years of undergraduate study or, when the standardized test score is below that required for regular admission, has a grade point average of 3.0 or higher for the last two years of undergraduate study and shows promise of successfully completing degree requirements; and (b) has the approval of the chair of the department, the Dean of the College, and the Dean of the Graduate School.

### **MASTER'S DEGREES**

# Master of Education with Emphasis in Early Childhood Education

	Hours
REF 601, 607	6
CIE 606, 770, 772, 776, 777, 778	18
Elective	3
CIE 698 (Thesis) or CIE 728.	

Both the thesis program and the non-thesis program consist of thirty (30) required hours. Substitutions for required courses or electives must be approved in advance and in writing by the department chair or the graduate coordinator.

# Master of Education with Emphasis in Elementary Education

Hours
REF 601, 6076
CIE 606, 705, 724, 725, 776
Elective
Select two courses from the following for six (6) hours: CIE 691, 706, 728, 729, 768, 778; EDA 600; GHY 617,
REF 604, 660; SCE 730, 731, 732, 733 or a graduate course consistent with an undergraduate concentration.
CIE 698 (Thesis) or CIE 728

Both the thesis program and the non-thesis program consist of thirty (30) required semester hours. Substitutions for both required courses and designated electives must be approved in advance and in writing by the department chair or the graduate coordinator.

# Master of Science and Master of Education with Emphasis in Secondary Education

Plan I (Thesis Program—MS Degree)	Plan II (Non-Thesis Program—MEd Degree)
Hours	Hours
REF 601, 6076	REF 601, 6076
CIS 700, 7546	CIS 700, 7546
CIS 698 (Thesis)3	CIS 7083

Both the thesis program and the non-thesis program consist of thirty (30) required semester hours. Substitution for required courses must be approved in advance and in writing by the department chair or the graduate coordinator.

In addition to the fifteen (15) semester hour core requirements of Plan I and Plan II listed above, a specialization of at least fifteen (15) semester hours must be taken in one of the following areas:

Art Music Education
Biology Physical Education
Chemistry Physics
English Science\*\*
Foreign Language Social Studies\*\*\*
Mathematics\* Speech Communication

# Master of Science and Master of Education with Emphasis in Reading

Plan I (Thesis Program—MS Degree)	Plan II (Non-Thesis Program-	-MEd Degree)
Hou	irs	Hours
REF 601, 607	6 REF 601, 607	6
CIE 705, 706	6 CIE 705, 706	6
CIE 713, 729, 733	9 CIE 713, 729, 733	9
CIS 754	3 CIS 754	3
Elective	3 Elective	3
CIE 698 (Thesis)	3 CIE 728	3

Both the thesis program and the non-thesis program consist of thirty (30) required semester hours. Substitutions for required courses or electives must be approved in advance and in writing by the department chair or the graduate coordinator.

#### SPECIALIST'S PROGRAMS

The Department of Curriculum and Instruction offers the Specialist in Education degree with a major in Education. The student has the option of taking an emphasis in early childhood education, elementary education, secondary education, or reading.

The student pursuing a specialist's degree with emphasis in secondary education may choose a specialization from a number of teaching (subject) areas.

Entrance into a particular specialist's degree program presupposes that the student has completed, or is willing to complete, the course work required for that program at the master's degree level.

All specialist's degree programs require a minimum of thirty-four (34) graduate semester hours beyond the master's degree.

The specialist's degree program requires admission to a particular program; submission of an approved program of studies; completion of all required course work, to include the completion of one full-time semester/term of residence taking all nine (9) semester hours on either the Hattiesburg Campus or the Gulf Park Campus, successful completion of the specialist's oral examination, and completion and defense of an approved thesis or field problem.

## **ADMISSION REQUIREMENTS**

To be considered for **regular admission** to a specialist's program, an applicant must have (a) a grade point average of at least 3.25 (figured on scale where A equals 4.0) on previous graduate work; (b) a total score of at least 900 on the Aptitude Test (verbal plus quantitative) of the **Graduate Record Examinations**, or a total score of at least 1975 for the three tests (Communication Skills, General Knowledge, and Professional Knowledge) of the Core Battery of the National Teacher Examinations (NTE), or a score of at least 44 on the Miller Analogies Test;

<sup>\*</sup>The student selecting mathematics as a specialization area may not use any mathematics course designated as a mathematics refresher course.

<sup>\*\*</sup>The student selecting science as a specialization area may use, with the approval of his or her adviser, a combination of biological and physical science courses; however, a minimum of nine (9) semester hours of graduate credit must be taken in an area of science for which the student holds a Class A endorsement. A student who holds Class A endorsements in two or more areas of science may qualify for Class AA certification in two areas by completing nine (9) semester hours of graduate credit in one of the endorsement areas and six (6) semester hours of graduate credit in the other endorsement area. No more than three (3) hours of science education (SCE) courses may be used. To be used in an endorsement area, the SCE course must be in that area.

<sup>\*\*\*</sup>The student selecting social studies as a specialization area may take courses in any one or a combination of the following disciplines: history, geography, political science, sociology, and economics.

and (c) the approval of the chair of the department, the Dean of the College, and the Dean of the Graduate School.

An applicant who fails to meet the criteria for regular admission may be considered for conditional admission if he or she (a) meets one of the standardized test score requirements for regular admission and has a grade point average of at least 3.0 on previous graduate work or, when the standardized test score is below that required for regular admission, has a grade point average of 3.25 or higher on previous graduate work and shows promise of successfully completing degree requirements; and (b) has the approval of the department's Graduate Admissions Committee, the chair of the department, the Dean of the College, and the Dean of the Graduate School.

#### SPECIALIST'S DEGREE

# Specialist in Education with Emphasis in Early Childhood Education

an I (Thesis Program)	TT		TT
	Hours		Hours
EF 602	3	PSY 670 or	
OA 620	3	REF 818	3
E 725	3	CIE 880	1
E 762	3	CIE 798 (Thesis)	6
	-	CIE 790 (Thesis)	
an II (Field Problem Program	)	CIL 196 (Thesis)	
an II (Field Problem Program	) Hours		Hours
an II (Field Problem Program	Hours3	PSY 670 or	Hours
an II (Field Problem Program	Hours3		Hours
an II (Field Problem Program	Hours3	PSY 670 or	Hours
an II (Field Problem Program EF 602 DA 620	Hours	PSY 670 or REF 818	Hours

In addition to the twenty-two (22) semester hour core requirements of Plan I and Plan II listed above, students pursuing the specialist's degree with an emphasis in early childhood education must complete at least twelve (12) hours in early childhood education.

The specialist's program with an emphasis in early childhood education consists of a minimum of thirty-four (34) semester hours beyond the master's degree. Substitutions for both required course and designated electives must be approved in advance and in writing by the department chair or the graduate coordinator.

## Specialist in Education with Emphasis in Elementary Education

Plan I (Thesis Program)			
	Hours		Hours
REF 602	3	PSY 670 or	
EDA 620	3	REF 818	3
CIE 706 or 729	3	CIE 880	1
CIE 762	3	CIE 798 (Thesis)	6
Plan II (Field Problem Program)	Hours		Hours
REF 602	3	PSY 670 or	
EDA 620	3	REF 818	3
CIE 706 or 729	3	CIE 880	1
CIE 762	3	Elective	3
		CIF 794 (Field Problem)	3

In addition to the twenty-two (22) semester hour core requirement of Plan I and Plan II listed above, students pursuing the specialist's degree with an emphasis in elementary education must complete at least twelve (12) additional semester hours in elementary education (preferably in a subject area or areas).

The specialist's program with an emphasis in elementary education consists of a minimum of thirty-four (34) semester hours beyond the master's degree. Substitutions for both required courses and designated electives must be approved in advance and in writing by the department chair or the graduate coordinator.

# Specialist in Education with Emphasis in Secondary Education

DI 7 (701 * D)	
Plan I (Thesis Program)	
Hours	Hours
REF 602, 8186	CIS 754 or 7083
PSY 675 or EDA 6203	CIS 8801
	CIS 798 (Thesis)6
Plan II (Field Problem Program)	
Hours	Hours
REF 602, 8186	CIS 754 or 7083
PSY 670 or 6753	CIS 8801
FDA 620	CIS 794 (Field Problem) 3

In addition to the nineteen (19) semester hour core requirements of Plan I and Plan II listed above, a specialization of at least fifteen (15) semester hours must be taken in one of the following areas:

Art Physical Education
Biology Physics
Chemistry Science\*\*
English Social Studies\*\*\*
Mathematics\* Speech Communication
Music Education

The specialist's program in secondary education consists of a minimum of thirty-four (34) semester hours beyond the master's degree. Substitutions for both required courses and designated electives must be approved in advance and in writing by the department chair or graduate coordinator.

\*The student selecting mathematics as a specialization area may not use any mathematics course designated as a mathematics refresher course.

\*\*The student selecting science as a specialization area may use, with the approval of his or her adviser, a combination of biological and physical science courses; however, a minimum of nine (9) semester hours of graduate credit must be taken in each area of desired science endorsement for which the individual holds a Class AA endorsement. The student must meet the requirements for a Class AAA endorsement in at least one science area. No more than three (3) hours of science education (SCE) courses may be used. To be used in an endorsement area, the SCE course must be in that area.

\*\*\*The student selecting social studies as a specialization area may take courses in any one or a combination of the following disciplines: history, geography, political science, sociology, and economics.

## Specialist's in Education with Emphasis in Reading

•			
Plan I (Thesis Program)			
	Hours		Hours
REF 602 or 818	3	EDA 620	3
PSY 670, 674,		CIE/CIS 880	1
or 675	3	CIE/CIS 798	6
Plan II (Field Problem Program)			
	Hours		Hours
REF 602 or 818	3	EDA 620	3
PSY 670, 674,		CIE/CIS 880	1
or 675	3	CIE/CIS 794 (Field Problem)	3
CIE 762	2		

In addition to the sixteen (16) semester hour core requirement of Plan I and Plan II listed above, the student must complete at least twelve (12) semester hours of coursework in reading or a collateral field approved by the graduate advisor.

## **DOCTORAL PROGRAMS**

The Department of Curriculum and Instruction offers Doctor of Education and Doctor of Philosophy degrees with a major in education and an emphasis in elementary education and secondary education. If a student desires to receive a Doctor of Philosophy degree, he or she should follow one of the doctoral programs outlined in this section and, in addition, gain proficiency in a foreign language.

The doctoral program with an emphasis in elementary education provides for specialization in both early childhood education and in reading. A student choosing an emphasis in elementary education, with or without a specialization in either early childhood education or in reading, must complete the requisite course work in that area prior to beginning doctoral study.

The doctoral program with an emphasis in secondary education provides for specialization in various teaching (subject) areas as well as in reading. A student specializing in a particular area must complete the requisite course work in that area prior to beginning doctoral study.

All doctoral programs consist of a minimum of seventy-five (75) graduate semester hours beyond the master's degree. A minimum of thirty-seven (37) of these hours must be taken on the Hattiesburg campus. More than seventy-five (75) hours may be required in order to satisfy deficiencies which may exist in the student's background and preparation.

Students should consult the departmental guidelines and the Admission Requirements and Procedures section and the General Academic Requirements section of the Graduate Bulletin.

### ADMISSION REQUIREMENTS

To be considered for **regular admission** to a doctoral program, an applicant must have (a) a grade point average of at least 3.5 (figured on a scale where A equals 4.0) on previous graduate work; (b) a total of at least 1000 on the Aptitude Test (verbal plus quantitative) of the **Graduate Record Examinations** (GRE); and (c) the approval of the department's Graduate Admissions Committee, the chair of the department, the Dean of the College, and the Dean of Graduate School.

An applicant who fails to meet the criteria for regular admission may be considered for **conditional admission** if he or she (a) meets the GRE score requirement for regular admission and has a grade point average of at least 3.25 on previous graduate work or has a GRE score of at least 950 and a grade point average of at least 3.5 on previous graduate work; and (b) has the approval of the department's Graduate Admissions Committee, the chair of the department, the Dean of the College, and the Dean of the Graduate School.

#### **DOCTORAL DEGREES**

# Doctor of Education and Doctor of Philosophy with Emphasis in Elementary Education

	Hours
REF 761, 762, 893	9
PSY 670, REF 816, or REF 818	
EDA 711 or 713	3
CIE (an advanced methods course)	3
CIE 791	3
CIE 862	3
CIE 880	3
CIE 898	12

In addition to the thirty-nine (39) semester hour core requirement listed above, students pursuing the doctoral degree with an emphasis in elementary education must complete at least twenty-four (24) hours beyond the master's degree in elementary education and a minimum of nine (9) hours in a related field(s) outside of the Department of Curriculum and Instruction.

Students desiring specialization in early childhood education must complete at least twenty-four (24) hours beyond the master's degree in early childhood and elementary education and a minimum of nine (9) hours in a related field(s) outside of the Department of Curriculum and Instruction.

Students desiring a specialization in reading must complete at least twenty-four (24) hours beyond the master's degree in reading and a minimum of nine (9) hours in a related field(s) outside of the Department of Curriculum and Instruction.

Students seeking an emphasis in elementary education, with or without a specialization in either early childhood education or in reading, are to choose electives to complete a program consisting of a minimum of seventy-five (75) graduate semester hours beyond the master's degree. More than seventy-five (75) hours may be required in order to satisfy deficiencies which may exist in the student's background and preparation.

#### Doctor of Education and Doctor of Philosophy with Emphasis in Secondary Education

	Hours
REF 761, 762, 893	9
PSY 675, REF 816, or REF 818	3
EDA 711 or 713	
CIS (an advanced methods course)	3
CIS 791	3
CIS 880	
CIS 898	

The thirty-six (36) semester hours of required course work listed above serve as a core program for students pursuing a doctoral degree with an emphasis in secondary education. The doctoral program consists of a minimum of seventy-five (75) graduate semester hours beyond the master's degree. More than seventy-five (75) hours may be required in order to satisfy deficiencies which may exist in the student's background and preparation.

Of the total number of hours required of a doctoral student with an emphasis in secondary education, thirty-three (33) semester hours of graduate credit (to include the master's degree) must be taken in one of the following specialization or content areas:

Biology Reading
Chemistry Science
English Social Studies
Mathematics

# DEPARTMENT OF EDUCATIONAL LEADERSHIP AND RESEARCH

Edgar Bedenbaugh, Chair Hattiesburg, MS 39406-5027 (601) 266-4579

The programs in Educational Administration and Supervision encompass the full range of administrative positions and lead to the master's degree, the specialist's degree, and the doctorate in education with an emphasis in educational administration. Programs at the master's degree level provide entry level preparation in the elementary school principalship, the junior high school principalship, the high school principalship, and supervision of instruction. Programs at the specialist's and doctoral levels provide preparation for the superintendency, central administrative staff positions, and leadership roles in other institutional settings. In addition, the program at the doctoral level provides preparation for college teachers in educational administration and persons desiring to prepare for administration in higher education.

The Research and Foundations components of the Department of Educational Leadership and Research provide supportive services in teacher education. At the graduate level, these services are provided in the areas of Educational Foundations, Educational Media and Technology, and Educational Research. Also offered are the specialist's degree and the doctoral minor emphasizing Educational Research.

The Adult Education component of the Department of Educational Leadership and Research offers programs of study which lead to four degrees in adult education: Master of Education (M.Ed.), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) Through the completion of courses and/or degrees in those programs, students may enhance their understanding of adults as learners as well as the many means by which educational services are developed and delivered to adults.

Academic preparation in adult education is dependent not only upon knowledge of adult education theory and practice but also upon knowledge from related areas of study, such as psychology, sociology, administration, and management. Consequently, the courses and degree programs often follow an interdisciplinary approach in preparing persons for roles of professional service to adults. Adult education majors are encouraged to enroll in professionally relevant courses in cognate fields. Students from other departments frequently find adult education courses to be valuable as electives or academic minors.

The following course patterns for the different levels set forth only the minimum core requirements, and the electives selected to suit individual needs and objectives must be chosen with

the advice and approval of the student's major professor. Therefore, it is mandatory that the student consult early in his or her program, and frequently thereafter, with his or her major professor concerning the selection of courses and sequence in which these courses will be taken.

#### DEPARTMENT POLICIES

The following departmental policies are supplementary to the rules and regulations of the University and the Graduate School as set forth elsewhere in this Bulletin.

### PROGRAMS AND COURSES IN EDUCATIONAL ADMINISTRATION

#### MASTER'S PROGRAMS

#### Master of Education Degree in Educational Administration

#### Admission

To be considered for regular admission to the master's degree program, the applicant must: (a) have a minimum grade point average of 2.75 on the last two years of undergraduate education; (b) present a combined minimum score of 850 on the **Graduate Record Examinations**, or a minimum score of 1965 on the core battery of the **National Teacher Examinations**, or a minimum score of 39 on the **Miller Analogies Test**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score, the **National Teacher Examinations** score, or the **Miller Analogies Test** score meets or exceeds the score required for regular admission but the grade point average is no lower than 2.5, or (b) the grade point average is higher than 2.75 and the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing degree requirements.

#### **Application for Graduation**

Graduation is based upon:

- Completion of an approved program of studies consisting of a minimum of thirty (30) semester hours. Adaptations in programs will be made to conform to administrative certification requirements.
- 2. Satisfactory completion of the comprehensive examination.

#### **Educational Administration**

Educational Administration	Hours
REF 601—Research: Its Introduction and Methodology	
REF 607—Basic Course in Curriculum Development	
Select three (3) hours from the following:	
REF 604, PSY 670, PSY 674, PSY 675	3
EDA 600—Basic Course in Educational Administration and Supervision	3
EDA 620—Supervision of Instruction*	3
EDA 650—School Business Management*	3
EDA 698—Thesis. Credit is deferred until thesis is completed**	6
Total 18 or 24 hours	
Advised selections: 6 or 12 hours. Subject to the approval of the student's adviser and consistent with	certification
requirements, courses are to be taken as follows:	
1) Six (6) semester hours in Educational Administration and Supervision must be tak	en by
students writing a thesis. nine (9) semester hours are required for those students no	t writing a
thesis. In either option, three (3) semester hours must be selected from the following	ng courses
depending on program emphasis:	
EDA 630—Organization and Administration of the Elementary School	3
EDA 634—Organization and Administration of the Secondary School	

<sup>\*\*</sup>Prerequisite: EDA 600

<sup>\*\*</sup>Required only of students writing a thesis

#### **Supervision of Instruction**

	Hours
REF 601—Research: Its Introduction and Methodology	3
REF 607—Basic Course in Curriculum Development	3
CIE 728 or CIS 708	
EDA 600—Basic Course in Educational Administration and Supervision	3
EDA 620—Supervision in Instruction*	
EDA 720—Advanced Curriculum Development**	
EDA 738—Practicum in Supervision**	3
EDA 698—Thesis. Credit deferred until thesis is completed***	
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Total 21 or 27 hours

Advised selections: 3 or 9 hours. EDA 630 or EDA 634 is required as an elective. The remaining courses will be selected from the related areas subject to the approval of the student's major professor.

### PROGRAMS AND COURSES IN EDUCATIONAL ADMINISTRATION

#### SPECIALIST'S DEGREES

#### Specialist in Education with Emphasis in Educational Administration

#### Admission

To be considered for regular admission to the specialist's degree program, the applicant must:
(a) have a minimum grade point average of 3.25 on previous graduate work; (b) present a combined minimum score of 900 on the **Graduate Record Examinations**, or a minimum score of 1975 on the core battery of the **National Teacher Examinations**, or a minimum score of 44 on the **Miller Analogies Test**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score, the **National Teacher Examinations** score, or the **Miller Analogies Test** score meets or exceeds the score required for regular admission but the grade point average is no lower than 3.0; or (b) the grade point average is higher than 3.25 and the Program Admissions Committee, department chair, Dean of the College, and the Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing graduate degree requirements.

#### **Application for Graduation**

Graduation is based upon:

- Completion of an approved program of studies as determined by the student's committee
  which may consist of more than the minimum thirty-three (33) semester hours of credit
  required for graduation.
- 2. Satisfactory completion of the comprehensive examination.
- 3. Successful defense of the research project or the field problem.

#### **PROGRAMS**

The specialist's degree students must have completed all courses or their equivalent in the master's degree program. Those courses not taken must be completed but will not count as part of the specialist's program. Additional electives are required for previously completed required courses.

A minimum of nine (9) semester hours in cognate areas is required in all of the specialist's degree programs. The department defines cognate areas as those courses which broaden and complement the student's program. These courses and other electives will be chosen with the approval of the student's major professor and additional hours may be required to satisfy deficiencies in the student's program.

<sup>\*</sup>Prerequisite EDA 600

<sup>\*\*</sup>Prerequisite EDA 620

<sup>\*\*\*</sup>Required only of students writing a thesis

#### Administration

EDA 700, 704, 706, 710, 720, 736, 738 EDA 794 or EDA 798 Total—24 or 27 hours Electives—6 or 9 hours in cognate areas

#### Secondary Administration

EDA 700, 704, 708, 710, 720, 738 EDA 794 or EDA 798 Total—21 or 24 hours Electives—9 or 12 hours with 9 hours in cognate areas

#### **Elementary Administration**

EDA 700, 704, 710, 720, 738 EDA 794 or EDA 798 Total—18 or 21 hours Electives—12 or 15 hours with 9 hours in cognate areas

#### School Business Management\*

EDA 650, 700, 704, 706, 708, 710 EDA 794 or EDA 798 Total—24 or 27 hours Electives—6 or 9 hours from business oriented courses Suggested courses are MGT 568, 572, 625; ACC 570; REF 712; FIN 640 \*Prerequisites: EDA 600; REF 607; REF 601

#### Administration of Occupational Education\*

(21 hours from these courses)

EDA 650, 700, 706, 710, 712, 717, 719; IVE 611

\*Prerequisites are EDA 600, 620; REF 604

EDA 794 or EDA 798
Total—24 or 27 hours
Electives—6 or 9 hours from the following cognate areas: Industrial Psychology,
Management Training and Development, Economic Development, Advanced
Labor Economics, and Economic Geography

#### Curriculum and Supervision\*

EDA 708, 720, 738; REF 632 CIE 728 or CIS 708 EDA 704 or EDA 601 EDA 794 or EDA 798 Total—21 or 24 hours Electives—9 or 12 hours with 9 hours in cognate areas \*Prerequisites are EDA 600, 620; REF 607, PSY 670

#### **Higher Education Administration\***

EDA 704, 711, 712, 713, 715, 717, 719 CPY 640 or CPY 740 (18 hours from the above courses) EDA 794 or EDA 798 Total 21 or 24 hours Electives—6 or 9 hours in cognate areas \*Prerequisites are EDA 600 and REF 601

#### DOCTORAL DEGREES

## **Doctor of Education and Doctor of Philosophy** with Emphasis in Educational Administration

#### Admission

To be considered for regular admission to the doctoral degree program, the applicant must: (a) have a minimum grade-point average of 3.5 on previous graduate work; (b) present a combined minimum score of 1000 on the verbal and quantitative sections of the **Graduate Record Examinations**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score meets or exceeds the score required for regular admission but the grade point average is no lower than 3.25; or (b) the grade point average is higher than 3.5 and the Program Admissions Committee, department chair, Dean of the College and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing graduate degree requirements.

#### **Qualifying Entrance Examination**

- 1. Should be taken prior to the completion of eighteen (18) semester hours of study within the department, but may not be taken before having attained regular admission status.
- 2. May not be taken prior to the receipt of satisfactory GRE scores.
- 3. Regularly admitted doctoral students who fail the examination may repeat it once.
- The results of a master's degree comprehensive examination may not be substituted for this
  examination.

#### **Planning Sheet**

Planning sheets are completed after the qualifying examination has been passed and the committee appointed.

#### **Admission to Candidacy**

Admission to candidacy should be submitted one semester prior to graduation and will be approved by the student's graduate committee upon:

- 1. Completion of an approved program of studies.
- 2. Satisfaction of the language and/or statistics requirement.
- 3. Completion of an approved dissertation prospectus.
- 4. Completion of the comprehensive examination.
- 5. Completion of the residency requirement.

#### **Application for Graduation**

Graduation is based upon:

- Meeting the departmental and Graduate School deadlines for receiving completed dissertation.
- 2. Successful defense of the completed dissertation.

#### **PROGRAMS**

At the doctoral level, programs are provided in: (1) General School Administration and (2) Educational Administration with an emphasis in Higher Education. The general administration program provides preparation for the superintendent, other central office positions, and college teachers, while the program emphasizing higher education is designed to prepare administrators of higher education.

The doctoral program requires a minimum of eighty-four (84) semester hours beyond the bachelor's degree exclusive of the dissertation and proficiency in statistics. A minimum of thirty-two (32) semester hours must be taken on the Hattiesburg Campus excluding REF 761, REF 762, and EDA 898. The student's doctoral committee, appointed by the Graduate Dean, will approve the selection of required courses and electives and, in order to secure breadth and depth in the student's preparation program, may require more than the minimum number of hours of graduate credit. Nine (9) hours of cognate area credit is normally required. The department defines cognate areas as those courses which broaden and complement the student's program. Cognates as well as other courses

will be chosen with the approval of the student's major professor and committee. A strength of the doctoral program is its flexibility. A program of studies is formulated after the successful completion of the Qualifying Examination and is based upon the student's performance on this examination, previous educational background, and professional objectives.

Each doctoral student will be required to participate in a variety of laboratory and field experiences, many of which may not be connected with specific courses.

#### PROGRAMS IN EDUCATIONAL RESEARCH

#### Specialist's Program in Educational Research

The program leading to the specialist's degree in Education (Ed.S.) is designed to meet those goals listed under the master's degree program. The program is intended to serve as (1) a terminal program at the specialist's level for individuals not pursuing the doctoral degree and as (2) an advanced research program for individuals desiring specialization in research in addition to their major areas at the doctoral level.

#### Specialist in Education with Emphasis in Educational Research

#### Admission

To be considered for regular admission to the specialist's degree program, the applicant must:
(a) have a minimum grade point average of 3.25 on previous graduate work: (b) present a combined minimum score of 900 on the **Graduate Record Examinations**, or a minimum score of 1175 (core battery 1975) on the **National Teacher Examinations**, or a minimum score of 44 on the **Miller Analogies Test**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score, the **National Teacher Examinations** score, or the **Miller Analogies Test** score meets or exceeds the score required for regular admission and the grade point average is no lower than 3.0; or (b) the grade point average is higher than 3.25 and the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing graduate degree requirements.

#### **Application for Graduation**

Graduation is based upon:

- 1. Completion of required course work;
- 2. Satisfactory completion of written and/or comprehensive examination;
- 3. Satisfactory completion of Thesis or Research Problem.

#### **Curriculum Requirements**

A student desiring to obtain a Specialist's degree in Research Training must possess a master's degree, and complete either twenty-seven (27) or thirty (30) semester hours of course work. Twenty-seven (27) hours are required for the student who writes a thesis (REF 798) and thirty (30) hours for the student who conducts a field problem (REF 794). The student must have also completed, or be willing to complete, the following prerequisites or their equivalents: \*REF 601 and \*602.

The following five courses (fifteen (15) semester hours) are required of each student:

Hours
REF 761, 762, 824, 830, 893
A student who chooses to write a thesis will complete one course (three (3) semester hours)
from among the following. A student who conducts a field problem will complete two courses (six
(6) semester hours).
ŘÉF 632, 770, 792
PSY 764
CSS 501, REF 645, CPY 614
Each student must complete either REF 794 (Field Problems—3 semester hours) or REF 798
(Specialist Thesis—6 semester hours).

Students will take nine (9) semester hours of electives to complete the program.

\*May be counted as electives in the specialist's degree program.

#### **Doctoral Minor in Educational Research**

Students majoring in a particular field or area at the doctoral level may also wish to pursue a doctoral minor in Educational Research. The objectives of the doctoral minor are to prepare persons to:

- initiate or direct applied or institutional research in college, private or public agencies, and school systems;
- 2. teach applied statistics and research methodology in institutions of higher learning;
- 3. advise graduate and undergraduate students relative to the research process involved in thesis, dissertations, and projects;
- 4. utilize available computer packages for statistical and informational processing;
- 5. serve as consultant to agencies involved in research or evaluation.

A minimum of twelve (12) semester hours is necessary in addition to REF 761 and REF 762 which are required for basic proficiency of all doctoral students in education.

The six (6) graduate courses (eighteen (18) semester hours) from the following represent the requirements for the doctoral minor:

	Hour
REF 761, 762, 824, 830, 893	15
CSS 501, REF 645	
Substitutions from the following list of courses may be made with departmental approval:	
DCV 764	

REF 632, 770, 791, 792, 794

#### PROGRAMS IN ADULT EDUCATION

Adult Education programs, by nature interdisciplinary and flexible, offer personnel from diverse agencies opportunities for upgrading and building on professional experience. Such agencies include vocational-technical centers, the armed forces, health services, criminal justice and law enforcement programs, public school systems, junior and senior colleges, human service agencies, the Cooperative Extension Service, business and industrial organizations, and others. AA and AAA certification requirements as set by the Mississippi Department of Education may be met through these programs.

Admission to degree programs will be conducted in accordance with College and University policies (please refer to the "Admissions Requirements and Procedures" section of the USM Bulletin: Graduate Programs). In general, these procedures include the submission of application and credentials to the Director of Graduate Admissions. Additionally, all degree applicants should send the program coordinator (a) a letter explaining the applicant's interest in and reasons for pursuing the degree and (b) a resume of academic and job-related experiences. The Admissions Review Committee will review all applications and recommend the appropriate actions.

Admitted students will be assigned a temporary adviser until the student, with the concurrence of the program coordinator, selects a permanent adult education adviser. Doctoral students will also select a doctoral advisory committee composed of four additional faculty members, at least one of whom must be a member of the Adult Education faculty. Then, in accordance with departmental policy, students, in collaboration with their appointed advisers, will design programs of study which reflect their long term goals and interests. Basic admissions eligibility and graduation criteria are discussed in the sections which follow.

#### Master of Education in Adult Education

#### Admission

To be considered for regular admission to the master's degree program, the applicant must: (a) have a minimum grade point average of 2.75 on the last two years of undergraduate education; (b) present a combined minimum score of 850 on the **Graduate Record Examinations**, or a minimum score of 1965 on the core battery of the **National Teacher Examinations**, or a minimum score of 39 on the **Miller Analogies Test**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score, the **National Teacher Examinations** score, or the **Miller Analogies Test** score meets or exceeds the score required for regular admission but the grade point average is no lower than 2.5, or (b) the grade point average is higher than 2.75 and the **Program Admissions Committee**, department chair, Dean of the College, and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing degree requirements.

#### **Curriculum Requirements**

The Master of Education degree requires thirty (30) semester hours of graduate course work (no thesis is required for this degree). In addition to the eighteen (18) hours of courses specified below, twelve (12) hours of electives must also be taken. If the student wants to receive AA certification in the State of Mississippi, additional course work will be required to meet state requirements for certification.

#### **Required Courses**

ADE 540, 576, 601, and 607 (ADE core)	Hours
REF 601 (Introduction to Research)	
REF 604 or 816 or 818 (Educational Foundations) or a sixth course in Adult Education	
Electives	
One additional ADE course	3
Courses in degree-related areas	9
	30

To graduate, students must complete an approved thirty (30) semester hour program of studies with an acceptable grade point average and successfully complete a written comprehensive examination.

#### SPECIALIST'S DEGREE IN ADULT EDUCATION

#### Specialist in Education with Emphasis in Adult Education

#### Admission

To be considered for regular admission to the specialist's degree program, the applicant must: (a) have a minimum grade point average of 3.25 on previous graduate work; (b) present a combined minimum score of 900 on the **Graduate Record Examinations**, or a minimum score of 1175 (core battery 1975) on the **National Teacher Examinations**, or a minimum score of 44 on the **Miller Analogies Test**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score, the **National Teacher Examinations** score, or the **Miller Analogies Test** score meets or exceeds the score required for regular admission but the grade point average is no lower than 3.0; or (b) the grade point average is higher than 3.25 and the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing graduate degree requirements.

#### **Curriculum Requirements**

The Specialist in Education degree requires thirty-three (33) semester hours of graduate work beyond the master's degree. Adult Education Specialist students must complete all ADE and REF courses (or their equivalents) specified for the Master of Education in Adult Education. Students are also required to complete either a thesis (ADE 798) or an appropriate field study (ADE 794). Altogether, students should complete twenty-one (21) semester hours of adult education courses and twelve (12) hours from relevant content areas or behavioral sciences related to the goals of the student. All courses must be approved by the student's adviser.

To graduate, students must complete an approved thirty-three (33) semester hour program of studies with an acceptable grade point average, successfully complete a written comprehensive examination, and successfully complete and defend an acceptable thesis or field study.

#### DOCTOR OF EDUCATION AND DOCTOR OF PHILOSOPHY

# Doctor of Education and Doctor of Philosophy with Emphasis in Adult Education

#### Admission

To be considered for regular admission to the doctoral degree program, the applicant must: (a) have a minimum grade-point average of 3.5 on previous graduate work; (b) present a combined minimum score of 1000 on the **Graduate Record Examinations**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score meets or exceeds the score required for regular admission but the grade point average is no lower than 3.25; or (b) the grade point average is higher than 3.5 and the Program Admissions Committee, department chair, Dean of the College and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing graduate degree requirements.

Full admission to the program is not complete until the qualifying examination has been passed.

#### **Curriculum Requirements**

Doctoral programs of study should be designed to provide competency in five areas: (1) the general field of adult education in the contemporary world; (2) psychology of adult learning; (3) social setting for adult learning; (4) foundations of education; and (5) specific abilities required for the student's particular area of professional interests, including both major areas of study and cognate fields. As early in the program as possible, doctoral students should select an area of emphasis for dissertation research. Programs of study (including all course decisions, research topics, and foreign language selections) must be approved by each student's advisory committee.

Doctoral students may pursue either the Ed.D. or the Ph.D. Both degrees require a minimum of 66 semester hours of course work (including dissertation) beyond the master's degree. Any hours taken to establish proficiencies in statistics, foreign languages, or areas of needed remediation are in excess of the 66 hour program minimum. Students pursuing the Ph.D. must establish proficiency in one foreign language approved by the Graduate School either through additional course work or through examination. All doctoral students must also complete a residency requirement, defined as two consecutive terms (which may include summer term) of minimum 12-hour course loads each. Students should not be employed full-time during residency. Physical residence on campus or in Hattiesburg is recommended but not required during residency.

#### **Departmental Program of Studies (minimum 66 credit hours)**

Doctoral students in adult education will complete a number of required courses and electives, but the program is designed to allow intensive pursuit of other areas in which adult educators may have interest or professional goals. Accordingly, there are several possible tracks students may pursue in addition to the requirements common for all students. The minimum required program includes:

	Hours
ADE 540, 576, 601, 607, and 889 (ADE Core)	15
ADE Electives (9 hours of which must be classroom courses)	12
ADE 898 (dissertation)	12
REF 601 and REF 602	6
REF 604, 816, or 818 or an additional elective in Adult Education	3
REF 761 and 762	6
Other Electives	18
	72

Within this program, students may pursue related areas in which to specialize, or tracks. Students are not required to be in a track; they are not prescriptive. They are, however, suggestive of possible plans for individual doctoral programs.

Administrative and Managerial: For those interested in public sector and private sector administration. In addition to ADE 602 and 603, recommended course areas would include Business, Management, Marketing, and Educational Administration.

Adult Basic Education: For those interested in teaching and administering adult basic and secondary education. Recommended courses include ADE 541, 542, 545, 602, and related courses

in Reading and English composition.

**Research:** For those interested in conducting research at a professional level. Recommended course areas would include statistics, research design, grant writing, historical research methods, psychology, and computers.

Career Specialization: For those interested in using their elective courses to pursue specific career interests, such as nursing, criminal justice, fine arts, liberal arts, business, technical fields, library services, etc. Many people in this track might be teachers or trainers in post-secondary institutions, health-related organizations, or business organizations.

**Gerontology:** For those interested in the older adult. In addition to ADE 580 and 750, germane courses in psychology, sociology, social work, and/or counseling are recommended.

#### Dissertation (12 hours)

During the dissertation process, all students must complete twelve (12) hours of ADE 898, Dissertation. A minimum of three (3) credit hours of ADE 898 must be completed during the semester in which the dissertation is defended. The student submits three documents to a doctoral committee of five faculty: a pre-proposal, a proposal, and a completed dissertation. The last two are defended orally. A student applies for candidacy only after all degree requirements are completed except the oral defense of the dissertation.

#### **Examinations**

Qualifying examinations are scheduled for the third Friday after registration in each term. Doctoral students must take this written examination in the first term of their course work. After the qualifying exam is successfully completed, but still during the first term, the student will schedule a program planning meeting with the Adult Education faculty.

Comprehensive written examinations are prepared by doctoral committee members and are taken at or near the conclusion of course work. They are based on material from the overall program, including the books on the doctoral reading list. The committee may require an additional oral examination at its discretion. Comprehensive examinations are taken by arrangement on an individual basis.

#### Graduation

To complete either the Ed.D. or Ph.D. degree in Adult Education, students must maintain an acceptable grade point average, complete all course work, complete necessary proficiencies, pass qualifying and comprehensive examinations, and successfully complete and defend a dissertation.

#### DEPARTMENT OF PSYCHOLOGY

John D. Alcorn, Chair Hattiesburg, MS 39406-5025 (601) 266-4177

The Department of Psychology offers graduate programs at the master's, specialist's and doctoral levels. Master's degrees with a major in Psychology (M.A. or M.S.) prepare students for advanced graduate work, to teach in junior/community colleges, or to conduct behavioral research. The Master's degrees in Counseling Psychology (M.S.) and Counseling and Personnel Services (M.Ed.) prepare entry-level counselor personnel for service delivery roles in community agency and educational settings. The M.S. program in Counseling Psychology also provides a track for students who wish to pursue advanced graduate study.

The department's Ph.D. programs in clinical, counseling, industrial/organizational, and school psychology are based on the scientist-practitioner training model which integrates scientific and professional components at all stages of training, preparing graduates for teaching, research, and practice roles in health service, governmental, educational, business/industrial, and/or academic settings. The Ph.D. program in general-experimental psychology prepares graduates for teaching and research roles in academic institutions and specialized research programs.

At the Ph.D. level, programs in clinical, counseling, and school psychology are fully accredited by the American Psychological Association (APA). In addition, the doctoral program in school psychology is accredited by the National Council for Accreditation of Teacher Education (NCATE). At the master's level, the program in counseling psychology is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), and the M.Ed. program Counseling and Personnel Services (school counseling emphasis) is accredited by NCATE. Since program requirements and curricula may vary from one program to the next, program brochures should be requested from the department if detailed information is needed.

Hours

#### MASTER'S DEGREE PROGRAMS

Students are admitted to the M.A. program in Psychology based on an assessment of their potential to successfully complete a doctoral program. Hence, admissions requirements are essentially the same as those as listed for the Ph.D. in Psychology (see description under Ph.D. in Psychology). Some students initially seek a doctoral degree but may, at some point, opt to terminate with a master's degree and typically complete a program leading to a Master of Science Degree in Psychology. Regardless, the completion of any master's degree does not guarantee admission to advanced doctoral study in one of the Ph.D. programs offered by the department.

Students are admitted to the M.S. in Counseling Psychology or M.Ed. in Counseling and Personnel Services based upon the student's previous academic record, scores on admission tests, and recommendations. To be considered for regular admission, an applicant must present a minimum grade-point average of 3.0 (B) on the last sixty-five (65) semester hours of undergraduate coursework applied to the bachelor's degree. A grade point average of 2.75 may be accepted with a GRE Verbal + Quantative score of 1000 or higher. Other admissions test score minimums for specific programs are as follows:

#### Master of Science in Counseling Psychology.

GRE Verbal + Quantitative score of 850 (400 minimum Verbal score).

#### Master of Education in Counseling and Personnel Services.

- A. College Student Personnel Emphasis—GRE Verbal + Quantitative score of 850, or a comparable score on the Miller Analogies Test or the National Teacher Examination.
- B. School Counseling Emphasis
  - 1. Track I (non-Teacher)—National Teacher Examination Core Battery score minimum of 1965, with sub scale minimums as follows:

Communication Skills - 651

General Knowledge - 646

Professional Knowledge - 649

 Track II (Certified Teacher)—A National Teacher Examination Core Battery score of 1965, or comparable scores on the Graduate Record Examinations or the Miller Analogies Test or the old form of the National Teacher Examination.

A limited number of students who do not meet requirements for regular admission will be considered for conditional admission. However, these admissions will usually be reserved for applicants from underrepresented populations who present strong evidence of potential for successfully completing a master's degree. Total numbers admitted to various programs at any given time are based on spaces available. The selection committee takes into account factors such as date of application, test scores, undergraduate grade-point-average and letters of recommendation.

Removal of conditional status will be granted with the completion of nine (9) semester hours of USM graduate work with a minimum of a B average and a positive recommendation of the counselor education program committee.

#### Curricula: M.A. and M.S. Degrees in Psychology

### Common Requirements for the Master of Arts and Master of Science Degrees with a major in Psychology

	Hours
Departmental Courses:	
PSY 607, 608, 621, 624, 635, 660, 661, 662, 663, 679	26
Electives (All elective courses must be approved by	
the student's major professor)	6
Master's comprehensive examination. Examination requirements are described in the	ne General

Master's comprehensive examination. Examination requirements are described in the General Academic Requirements section of the Bulletin.

#### Additional Requirements for the Master of Arts Degree

Departmental Courses:	
Master's Thesis: PSY 698	6

Foreign Language Requirement: Proficiency in one Foreign Language is required for the

M.A. degree. Specific proficiency requirements are described in the General Academic Requirements section of the **Bulletin**.

Note: Students completing the M.S. degree in preparation for doctoral study must complete a master's thesis in addition to the requirements listed under Common Requirements for M.A. and M.S. degrees. Completion of the M.A. or M.S. degree with thesis does not guarantee admission to the doctoral degree program.

#### **Curriculum: School Psychology Certification Program**

The School Psychology entry-level training program is designed to prepare students who plan to make application for certification as School Psychologists (AAA) in Mississippi as well as in most other states. In addition to the requirements listed under Common Requirements for M.A. and M.S. Degrees, the student must take the following:

	Hours	
Departi	nental Courses:	
PSY 6	14, 642, 643, 670, 671 (6 hours), 693 (2 hours), 771 (6 hours),	
772 (	6 hours), 777, 793 (2 hours)	
Resea	rch Requirement: PSY 698 or 691	
Note: Six of the required 37 semester hours of course work may be taken as master's degree electives. Six		
	with non-thesis master's degrees must complete a supervised research project. Those seeking certification	
	as school psychologists must complete a one-year internship (PSY 880: 8 to 12 hours credit). Each	
	student, in consultation with the major professor, should identify any additional requirements necessary	
	for certification in the state in which the student plans to work.	

#### Curriculum: M.S. Degree in Counseling Psychology

The Master of Science in Counseling Psychology is designed to accommodate the needs of students who plan to seek employment in human services agencies. Research and statistics courses are available for those students who may wish to prepare for doctoral study. The program is accredited under the Community Counseling area by the Council for Accreditation of Counseling and Related Educational Programs.

	nours
Required Core Courses	
PSY 612, 613, 614, 630, 642, 652, 679, 710, 711, 712, 713, 714, 762	39
Research Tools: PSY 659, REF 602	6
Internship: PSY 796	6
Foundations, Environmental/Specialized Studies	
Total Requirements: 60 hours	
Note: Course planning is undertaken with the heakgrounds and needs of st	tudents in mind. The aurriculum may

Note: Course planning is undertaken with the backgrounds and needs of students in mind. The curriculum may be slightly modified to meet individual needs of students (with approval of adviser). Detailed curriculum guides are available upon request.

#### Curriculum: M.Ed. Degree in Counseling and Personnel Services

#### A. College Student Personnel Emphasis.

This emphasis prepares graduates for student personnel positions in community/junior colleges, colleges, and universities. Students may enter the College Student Personnel emphasis from any undergraduate major.

	Hours
Required Courses	
PSY 611, 612, 614, 640, 653, 710, 739, REF 601 and 602	27
Approved Electives	3
Total Requirements: 30 hours	

#### **B. School Counseling Emphasis**

1. Track I (Alternate route to certification)

This track of the school counseling emphasis is designed to meet the needs of non-teachers who wish to qualify for Class AA school counselor certification in Mississippi. Students may enter this track from any undergraduate major. Track I requires a minimum of one year of full-time graduate study on the Hattiesburg campus and one year of full-time internship. It should be noted that this track is designed for persons who wish to pursue a degree; the Department does not offer a "certification only" alternate route.

p : 10	nours
Required Courses	
PSY 610, 611, 612, 614, 652, 796, 710, 711, REF 601, 602, and 607	42
Professional Specialization Area	12
Total Requirements: 54 hours	

#### 2. Track II

This track of the school counseling emphasis is designed to meet the needs of teachers who wish to qualify for Class AA school counselor certification. A Class A Standard Teaching Certificate or

equivalent is prerequisite for admission. It is essentially a summer program; some of the required courses are offered only during Summer Term.

	Hours
Required Courses	
PSY 610, 611, 612, 614, 652, 653, 710, 711, REF 601 and 602	30
Required for Mississippi Certification only:	
REF 607	3
Total Paguiraments: 20 22 hours	······································

#### Application for Graduation

Graduation is based upon:

- 1. Completion of required course work in respective program.
- 2. Satisfactory completion of comprehensive examination.
- 3. Satisfactory performance in the counseling practica.

#### Curriculum: Specialist's Degree

The Specialist's degree in Education with an emphasis in Counseling and Guidance is offered in the College of Education and Psychology. A description of the basic program is provided elsewhere. A master's degree and Class AA certification or equivalent are prerequisites for enrollment in the program leading to AAA certification as a school counselor. Program plans are developed on an individual basis by the student and a departmental adviser, but must be preceded by a Master's Degree in the area for which specialization is sought.

#### DOCTORAL DEGREE PROGRAMS

#### Ph.D. in Counseling Psychology

Minimum course requirements for the Ph.D. in Counseling Psychology are sixty to sixty-six (60-66) semester hours not including research tools, dissertation, and internship. Forty-two (42) semester hours are included in the professional core and a minimum of twenty-four (24) semester hours is required in psychological foundations. Electives may be utilized to develop emphases areas.

#### Admissions

The Ph.D. Program in Counseling Psychology admits an average of seven to eight new students each year (based on a ratio of approximately one student for each full-time equivalent faculty member). Students may be admitted to a predesignated doctoral class opening upon completion of a bachelor's degree or upon completion of a master's degree. Applications are processed one time per year (fall admission) with a submission deadline of February 1. In reviewing applications, the committee will consider the following:

- (a) Aptitude scores on the Graduate Record Examinations
- (b) Previous grade point average
- (c) Recommendations of professors and professional employers/supervisors
- (d) Previous work experience
- (e) Ratings from on-campus interview
- (f) Research and publications

#### **Minimum Admission Requirements**

Regular: Students entering at the post-master's level must have a minimum grade point average of 3.50 on previous graduate work and a combined score (verbal + quantitative) of 1000 on the aptitude section of the **Graduate Record Examinations**. Students entering at the post-bachelor's level must have a minimum grade-point-average of 3.25 on their total undergraduate program and a combined score (verbal + quantitative) of 1100 on the aptitude section of the **Graduate Record**Examinations

Conditional: Where granted, conditional admissions will be reserved for applicants who do not meet all of the regular admission requirements but who are members of underrepresented populations and present evidence of outstanding potential for doctoral study. Such applicants should have a grade point average of at least 3.50 on previous graduate work and a GRE score no lower than 900 or a grade point average between 3.25 and 3.50 and a GRE score of at least 1000.

#### **Qualifying Examinations**

The qualifying examinations usually will be taken following the second semester of the third year of graduate study (or first year of post-master's study).

#### **Comprehensive Examinations**

Comprehensive examinations will be scheduled by individual appointment during or after the last semester in which the student is enrolled in core courses listed on the approved course of study and will consist of written and/or oral questions.

#### Residency

Completion of the minimum residency requires full-time on-campus study for two consecutive semesters. However, due to the intensive nature of the training involved in the program, it is highly recommended that students not apply unless they can remain in residency for at least two to three years. During the residency, students are expected:

- 1. To carry a minimum course load of twelve (12) hours per semester for at least the first year.
- To participate in a variety of credit and non-credit departmental activities, laboratory and practicum experiences, individual case work, field trips, and other related professional activities.
- 3. To be relieved of job responsibilities with off-campus employers.

#### Internship

One year of pre-doctoral internship (1900-2000 hours) experience is required. Doctoral internships are off-campus, involve full-time responsibilities, and are usually paid.

#### Evaluation

Due to the professional nature of the counseling psychology program, students' performance in courses, practica, and graduate assistantships is evaluated on a continuing basis. Progression from one major transition point (i.e., completion of a master's degree, qualifying examinations, permission to apply to internships, comprehensive examinations, etc.) to the next requires an endorsement by a majority of the core faculty.

#### Ph.D. in Psychology

The Department offers the Ph.D. in psychology in four emphasis areas: clinical, general-experimental, school, and industrial/organizational psychology. These doctoral emphasis areas are designed to ensure that students receive strong preparation in the research and theoretical literature of psychology as an experimental behavioral science. Further, as part of a publicly supported institution of higher education, departmental resources for training, research, and service functions are directed toward the indentification and solution of behavioral problems within the public sector.

Students are admitted to one of these programs after completing a master's degree in psychology as described in the section on master's degrees. Students who apply to a doctoral program and have not completed such a master's degree must do so at USM en route toward their doctorate. Applicants are judged on the basis of prior academic record, GRE scores, letters of recommendation, and evidence of creative scholarship. For regular admission, a student must (1) have a B average or better on the most recent 60 semester hours of academic work, (2) have a minimum score (quantitative + verbal) of 1,000 on the aptitude section of the Graduate Record Examinations (GRE), and (3) have completed appropriate undergraduate foundation courses in psychology (e.g., statistics, experimental, and history and systems). A student may be invited to come to campus for a personal interview as part of the application process. Because the department receives applications from a larger number of qualified applicants than it can enroll, the credentials of entering students typically exceed these minimum standards. Prospective students should specify their intended emphasis area at time of application. Brochures describing each of these are available from the department. New students are normally admitted only in September. Applications received by March 1 will receive a full review. Applications received after that date will be considered if openings are still available. All students interested in applying for admission to the program are encouraged to contact the department prior to submitting their applications.

#### Common Requirements for the Ph.D. in Psychology Hours Departmental Courses: PSY 898 (12 hours).... Foreign Language Requirement: One Foreign Language and proficiency in Statistics are required for the doctoral degree. Specific proficiency requirements are described in the General Academic Requirements section of the Doctoral qualifying and comprehensive examinations. Examination requirements are described in the General Academic Requirements section of the Bulletin. Requirements for an Emphasis in General Experimental Psychology In addition to the requirements listed under Common Requirements for the Doctor of Philosophy degree, the student must take the following: Hours Departmental Courses: PSY 701 (1 hour), 702; 721, 722, or 725 (3 hours); All electives must be approved by the student's major adviser and emphasis area director ..... Requirements for an Emphasis in Clinical Psychology In addition to the requirements listed under Common Requirements for the Doctor of Philosophy degree, the student must take the following: Hours Departmental Courses: PSY 518, 616, 640, 641; 721, 722, or 725; 734, 735 (9 hours), 736, 737, 740, 741, 750, 780, 782 (minimum of 9 hours), Electives: All electives must be approved by the student's major adviser Requirements for an Emphasis in Industrial/Organizational Psychology In addition to the requirements listed under Common Requirements for the Doctor of Philosophy degree, the student must take the following: Hours Departmental Courses: PSY 551, 614 or 768, 615 (4 hours), 691 (4 hours); 721, 722, or 725; 750, Minor: Students in the I/O emphasis area must complete a 12-hour minor in Management with courses Other minors can be arranged with approval of the Director of Training for the I/O program. Electives: All electives must be approved by the student's major adviser Requirements for an Emphasis in School Psychology In addition to the requirements listed under Common Requirements for the Doctor of Philosophy degree, the student must take the following: Hours Departmental Courses: PSY 614, 642, 643 (9 hours), 670, 671 (6 hours), 693 (2 hours); 721, 722 or 725; 750, 771 (12 hours), All electives must be approved by the student's major advisor and emphasis area director. The selection of an internship must conform to NASP and CDSPP standards. Students completing the doctoral degree program with an emphasis in School Psychology will be eligible

to apply for Mississippi AAAA School Psychologist certification. Each student, in consultation with the major professor, should identify any additional requirements necessary for certification in the state in

which the student plans to work.

#### DEPARTMENT OF SPECIAL EDUCATION

James A. Siders, Chair Hattiesburg, MS 39406-5115 (601) 266-5236

The Department of Special Education offers graduate programs leading to the master's (M.Ed.), specialist's (Ed.S.), and the doctoral (Ed.D., Ph.D.) degrees. Non-majors and experienced teachers may take work leading toward certification, enrichment, or competency in areas of interest.

#### MASTER'S PROGRAM

The master's degree program offers several options to the student. This program is open to non-special education majors who possess certification in another area of education. The candidate may specialize in a specific area or may elect to combine general special education areas. In general, each program will include six (6) semester hours in Educational Research and Foundations (REF 601, 607), cognate hours, area course requirements, and elective hours to total a minimum of thirty (30) semester hours. A thirty-six (36) hour minimum is required of teachers not certified in special education and desiring certification in mild-moderate disabilities. Certification in severe/profound disabilities is also available. Certification resulting from the master's degree is the responsibility of the student obtaining the degree. Clarification of certification outcomes should be confirmed prior to beginning the program.

	HOULS
Mental Retardation—SPE 640, 641, 643, 644, 645, 709, 770	21
Specific Learning Disabilities—SPE 630, 631, 632, 634, 709, 770	
Emotionally Disturbed—SPE 650, 651, 652, 654, 709, 770	
Gifted—SPE 560, 661, 662, 663, 664, 709, 770	21

#### SPECIALIST'S PROGRAM

The specialist's degree is granted upon completion of a specifically planned program of study leading to competency in an area of Special Education. The purpose of this program is to train highly qualified personnel in the education of exceptional children and adults. The program consists of a minimum of thirty-three (33) semester hours in a planned sequence to include the major area, cognates, research, and practicum. A field study (SPE 794) or thesis (SPE 798) is required.

#### DOCTORAL PROGRAM

The doctoral program is comprehensive and places emphasis on teacher education, administration, research, and community services. (An internship is required in at least one of the above.) The candidate is expected to develop competency in each of the above areas; and the program will be based upon these as well as experience, background, and information gathered from written and oral qualifying examinations.

Required courses include:

Teacher Education	SPE 801, 803, 880
Administration	SPE 770, 772
Research	
Community Service	

In addition, each candidate will be expected to include a minimum of six (6) semester hours with a department outside of Special Education. Twelve (12) hours of academic credit are given for the dissertation (SPE 898).

#### Admission

All graduate degree candidates must conform to the entrance and academic requirements listed in this **Bulletin** as indicated by the School. In addition to the general requirements for admission to the Graduate School, to be admitted on a regular basis to the department, the candidate must earn a minimum score on the combined aptitude section of the GRE of 900 (quantitative plus verbal) for the master's and specialist's, and 1000 (quantitative plus verbal) for the doctoral degree. NTE common and area test scores totaling 1125 may be substituted for the GRE at the master's level; 1175 at the specialist's level. The new NTE Core Battery scores totaling 1965 may be used at the master's; 1975 at the specialist's. **Miller Analogies Test** scores of 39 may be used at the master's level; 44 at the specialist's level. A GPA of 3.0 is required. A minimum of two years of professionally appropriate experience is also required for admission to the specialist's and doctoral

programs. Conditional admission may be considered for applicants whose grades or GREs are marginal, but other evidence indicates a high probability of success in graduate school. In such cases, grades in selected courses, previous experience, letters of recommendation, and personal interviews may be more heavily weighted.

Certification and teacher education degree programs are similar but not identical. Graduate students will be responsible for determining the resulting certification from a degree program. Students are strongly encouraged to confirm certification resulting from a given program at the admissions stage.

# COLLEGE OF HEALTH AND HUMAN SCIENCES

Graduate Degrees 1994-1995

Department	Major	Degree
	Master's Level	
School of Home E		
	Family and Consumer Studies Family and Consumer Studies Emphasis Marriage and Family Therapy Emphasis	Master of Science
	Human Nutrition	Master of Science
	Institution Management	Master of Science
School of Human land Recreation	Performance	
	Human Performance Coaching and Sport Administration Emphasis Exercise Science Emphasis Physical Education Emphasis	Master of Science
	Recreation	Master of Science
School of Nursing		
	Nursing Adult Nursing Community Health Nursing Nursing Service Administration Psychiatric Nursing Family Nurse Practitioner	Master of Science in Nursing
School of Social W	Vork	
	Social Work	Master of Social Work
Center for Commu	nity Health	
	Public Health Health Education Emphasis Health Policy and Administra Emphasis Occupational and Environmen Emphasis	
	Doctoral Level	
School of Human land Recreation	Performance	
	Human Performance	Doctor of Education
	Administration and Teaching Emphasis	Doctor of Philosophy
	Human Performance	Doctor of Philosophy

**Exercise Physiology Emphasis** 

# COLLEGE OF HEALTH AND HUMAN SCIENCES

Allison A. Yates, Dean J. Allen Ellard, Assistant Dean Hattiesburg, MS 39406-0075 (601) 266-5253

The College of Health and Human Sciences currently offers graduate degree programs at the Master of Public Health, Master of Science, Master of Science in Nursing, Master of Sciel Work, Doctor of Education and Doctor of Philosophy levels. Succinct descriptions of the degree programs within the School of Home Economics, the School of Human Performance and Recreation, the School of Nursing, the School of Social Work, and the Center for Community Health can be examined in the respective sections. The graduate programs are oriented toward meeting career objectives in the professional and educational markets and promoting advanced study in areas of interest to the students.

#### REQUIREMENTS FOR ADMISSION

Admission to the Graduate School for study in the College of Health and Human Sciences requires a minimum grade point average of 2.75 at the undergraduate level and a GRE score of at least 850 for master's level and 1000 for doctoral study, plus additional criteria in certain schools (see general admission requirements of the individual schools). Exceptions to these requirements must be approved by the major adviser, director of the School, the Dean of the College, and the Graduate School Dean.

#### REQUIREMENTS FOR GRADUATION

In the College of Health and Human Sciences, the minimum requirements for the Master's and Doctoral degrees are determined by the individual graduate programs within the five units. Programs offer both the thesis and non-thesis option, with the doctoral programs mandating a dissertation. All general Graduate School requirements outlined earlier in this **Bulletin** must be satisfied for students to progress successfully toward degrees. Regardless of degree level pursued, the student is responsible for following all graduate regulations. The student's major professor will assist, but the student is expected to know what is required and to take full responsibility. Comprehensive exams (both oral and written) may be required in lieu of, or in addition to, completion of the thesis or dissertation. Consult the specific degree programs for their requirements.

#### SCHOOL OF HUMAN PERFORMANCE AND RECREATION

Sandra K. Gangstead, Director James W. Larson, Graduate Coordinator Hattiesburg, MS 39406-5142 (601) 266-5386

The School of Human Performance and Recreation offers the Master of Science, the Doctor of Education, and the Doctor of Philosophy degrees. Program development is oriented toward supply and demand in the professional job market; flexibility of program requirements allows for academic fulfillment of individual career interests.

Admission to programs leading to the Master of Science degree requires an acceptable score on the **Graduate Record Examinations**, (850 combined verbal and quantitative scores) a GPA of 2.75 or higher at the baccalaureate level, and a minimum of an undergraduate minor (or its equivalent) in an appropriate\* field of study. The Master of Science degrees require a minimum of 36 semester hours beyond the bachelor's degree.

The Doctor of Education and Doctor of Philosophy degrees require a minimum of sixty (60) semester hours beyond the master's degree, including the dissertation. Consideration for admission will be based upon the following criteria:

 A. Acceptable score on the Graduate Record Examinations (1000 combined verbal and quantitative scores)

<sup>\*</sup>Specific competencies for admission are determined by each program area.

- B. Previous academic achievement (GPA of 3.5 or above on all previous graduate work)
- C. Professional achievements
- D. Previous academic work at either the undergraduate or graduate level in an appropriate field of study.
- E. A personal interview before a representative committee of the School of Human Performance and Recreation graduate faculty.

Prior to completion of the 15th semester hour in the HPR graduate program (master's or doctoral), the student must request approval of an advisory committee through the Director's office. Upon approval of committee membership by the Graduate Dean, the student must submit a proposed plan of study for advisory committee approval. This plan should include all degree requirements and specification of planned electives and options within the degree program. The approved plan should be forwarded to the director's office prior to the student's enrollment in his/her 16th graduate hour.

Written and oral examinations are required of all graduate students in the master's and doctoral programs. Requests to take the comprehensive examination must be made in writing the semester prior to administration of the examination. The request should be sent to the Director, School of Human Performance and Recreation, and the following typed information is to be included:

- A. Your name as it appears on official school records
- B. Your Social Security number
- C. Your major and emphasis area
- D. Your address and telephone number (during semester in which examination will be taken)

The student's advisory committee shall be responsible for administration and evaluation of the comprehensive examination. The chair of the advisory committee shall be responsible for reporting the results of the examination to the Director.

A student's thesis or dissertation committee may be comprised of members of his/her advisory committee. It is expected that at least two HPR graduate faculty members will be included on the student's thesis/dissertation committee. An eligible HPR graduate faculty member must serve as chair of the thesis/dissertation committee. The student may request eligible members outside of the School to serve on the committee. All committee membership (advisory or thesis/dissertation) must be approved by the Graduate Dean. All committee membership requests are submitted to the Graduate Dean upon the approval of the Director of the School.

#### MASTER OF SCIENCE PROGRAMS HUMAN PERFORMANCE

Course requirements for the Master of Science degree in Human Performance include a minimum of thirty-six (36) semester hours of graduate work plus any undergraduate courses deemed necessary to correct deficiencies in the student's background. This degree program is designed to prepare professionals for leadership roles as teachers, coaches, sports administrators, program supervisors, or exercise specialists. This degree program prepares students for advanced graduate work or careers in the following emphasis areas: (1) coaching and sport administration, (2) exercise science, and (3) physical education.

#### Requirements for an Emphasis in Coaching and Sport Administration

The Coaching and Sport Administration emphasis is designed to prepare students for a career in school or college athletic administration and/or coaching. The program also serves to prepare the student for job opportunities within the sport business industry including: facility/arena management, resort camp and club management, sporting goods corporations, professional team management and governing agencies of sport. Through careful selection of courses, the student may also gain foundational movement science background in coaching education and performance enhancement (strength and conditioning).

The program utilizes an interdisciplinary approach by including course study in the areas of Business Administration, Journalism, Communication, and selected courses in Human Performance.

#### Required Courses (36 hour minimum)

	Ho	ur
HPR 605:	Policy and Governance in Sport	3
HPR 670:	Administration of Athletes and Sport	3
HPR 677:	Sport Law	3
HPR 696:	Practicum or HPR 698 Thesis	6
Select one of	course from REF 602, CHS 540, HPR 711, CSS 515, or PSY 660	3
HPR 680:	Research Techniques	
Electives from	om the following courses, depending on emphasis (15 hour minimum):	
HPR 509:	Psych. & Soc. Aspects of Motor Performance	3
HPR 534:	Facility Design and Maintenance	3
HPR 570:	Development of Strength and Conditioning Programs	3
HPR 676:	Athletic Seminar	3
HPR 679:	Care & Treatment of Athletic Injuries	3
HPR 705:	Motor Learning	
HPR 833:	Nutrition and Human Performance	3
ACC 511:	Financial Accounting	3
MGT 500:	Management Theory	3
MGT 610:	Organizational Management	
MGT 620:	Organizational Behavior and Practice	3
MKT 550:	Marketing Foundations	3
MKT 595:	International Marketing	3
ACC 560:	Managerial Accounting	3
ECO 520:	Managerial Economics	3
FIN 570:	Managerial Finance	3
MIS 580:	Management Information Systems	3
JOU 521:	Public Relations	
JOU 525:	Business & Professional Publications	3
RTF 516:	Telecommunication & Media Management	3
MC 607:	Mass Comm. Theory OR RTF 507 Theories of Mass Comm.	3
SCM 530:	Communication and Small Group Decision-Making	3

#### Requirements for an Emphasis in Exercise Science

Students wishing to select the Exercise Science emphasis must have completed a baccalaureate degree in Exercise Science (or a related field) including undergraduate work with at least six hours of chemistry or biochemistry, and other work in anatomy, physiology, kinesiology, and nutrition. This emphasis is specifically designed to prepare students as exercise/fitness and/or cardiac rehabilitation specialists in clinical, corporate, and recreational settings.

#### Required Courses (40 hour minimum)

	Required Courses (40 nour minimum)	
		Hours
HPR 601:	Exercise Physiology	3
HPR 602:	Theory and Practice of Graded Exercise Testing	3
HPR 593:	Exercise Specialist	3
HPR 703:	Advanced Kinesiology	3
HPR 706:	Cardiovascular Physiology	3
HPR 708:	Pediatric Exercise Physiology	3
HPR 730:	Cardiac Rehabilitation	3
HPR 780:	Graduate Seminar	
HPR 834:	Biomechanical Analysis of Sports Skills	3
Select one	course from REF 602, CHS 540, HPR 711, CSS 515, or PSY 660	3
HPR 680:	Research Techniques	3
Thesis Opti	ion:	
HPR 698:	Thesis	6
Select one	course from REF 601, REF 761, or CHS 623	3
Non-Thesis	s Option:	
HPR 796:	Practicum	6
Approved I	Electives	6

#### Requirements for an Emphasis in Physical Education

Students wishing to pursue careers in the instruction of movement and fitness activities in school and non-school settings should pursue this emphasis within the degree program. Students seeking Mississippi AA Teacher Certification must presently have an A Standard Teacher Certificate in Physical Education and must select this emphasis within the Human Performance

degree. An undergraduate degree in Physical Education from an NCATE accredited institution is required in the AA certification program. A baccalaureate degree in teaching is not necessarily required for admission into this area of the M.S. degree program, but a related field is highly recommended.

#### **Required Courses (36 hour minimum)**

	· · · · · · · · · · · · · · · · · · ·	Hours
HPR 677:	Sport Law or EDA 710: School Law	3
HPR 705:	Motor Learning	3
HPR 720:	Admin. of Human Performance Programs	3
HPR 723:	Adv. Methods of Teaching Physical Education	3
HPR 742:	Program Design in Human Performance or	
*REF 607:	Basic Course in Curriculum Development	3
HPR 744:	Foundation & Trends in Human Performance & Recreation	3
HPR 745:	Analysis of Teaching & Supervision in PE	3
Select one	course from either HPR 501, 504, 509, or 534	3
Select one	course from REF 602, HPR 711, CHS 540, CSS 515, or PSY 660	3
HPR 680:	Research Techniques or	
*REF 601:	Research Introduction and Methodology	3
The stude	nt must choose from either the thesis or non-thesis option listed below:	
Thesis Or	tion:	
HDD 608.	Chesis	6
HFK 096.	110515	
Non-Thes	is Option:	
HPR 796: I	Practicum (3-6 hrs.) or Adviser Approved Electives (3-6 hrs.)	6
	nust be taken in order to receive recommendation for Mississippi AA Teacher Certifica	
Education.	· ·	

#### RECREATION

All students pursuing a Master's of Science in Recreation must fulfill the following program requirements as part of their degree program. The program is designed to provide students with additional academic preparation for work in the administration of municipal, therapeutic, or commercial programs. Depending on the applicant's undergraduate preparation, the student may be required to take prerequisite courses in addition to the requirements of the graduate degree program.

#### Requirements (36 hour minimum)

requirements (50 nour minimum)	
	Hours
HPR 694: Field Problems	1
HPR 744: Foundations and Trends in Human Performance & Recreation	3
HPR 712: Philosophical Foundations of Recreation	3
HPR 713: Special Field Studies in Recreation	3
*Approved Electives	14
Select one course from REF 602, HPR 711, CHS 540, CSS 515, or PSY 660	
HPR 680: Research Techniques	3
Students must select one of the following options:	
Thesis Option:	
HPR 698: Thesis	6
Internship Option:	
HPR 696: Practicum and completion of a professional paper	6
Coursework Option:	
Approved Electives	
*Electives are to be designed for further specialization in community and municipal recreation, re	source
management, therapeutic recreation, or commercial recreation.	

#### DOCTORAL PROGRAM

#### **HUMAN PERFORMANCE**

The Doctor of Philosophy and Doctor of Education degrees offered through the School of Human Performance and Recreation are in Human Performance. The Doctor of Philosophy degree program includes emphases in Administration and Teaching and Exercise Physiology. The Doctor of Education degree program is designed to include the Administration and Teaching emphasis only.

In addition to the general admission and academic regulations and requirements of the University, doctoral requirements are:

- Upon the acceptance of the dissertation by the candidate's committee and at least four weeks
  prior to graduation, a final oral examination in defense of the candidate's dissertation will be
  administered by the student's dissertation committee.
- Programs of study, including all course decisions, research topics, and additional requirements specified by the University for proficiency in statistics, computer science and/or foreign language must be approved by each student's advisory committee.
- The foreign language and statistics requirements for the doctoral degree may be fulfilled in several ways:
  - a. The Doctor of Education does not require foreign language proficiency. However, the student must establish proficiency in statistics or computer science either by examination or by completing a prescribed course sequence, the credit hours for which do not apply toward a degree.
  - b. The Doctor of Philosophy degree requires either (a) proficiency in two languages, (b) proficiency in one language and in statistics or computer science depending on emphasis chosen or (c) proficiency in one language and the completion of a nine-hour minor, the hours for which do not apply toward the degree. Students preparing for advanced teacher certification or who plan to seek careers in teacher preparation must complete the doctoral statistics proficiency requirements.
- 4. Students who select the Exercise Physiology Emphasis must demonstrate successful completion of undergraduate or graduate work in the following areas: anatomy, physiology, kinesiology, biochemistry, and nutrition. Graduate level work comparable to that listed under the M.S. in Human Performance/Exercise Science emphasis in the Graduate Bulletin, or a graduate degree from a related discipline is required for full admission into this area within the doctoral program.

Statistics requirements may be met by choosing nine hours of the following or by approval of the student's advisory committee.

	Hours
REF 602: Introduction to Educational Statistics	
PSY 761: Experimental Design	., 3
PSY 764: Factor Analysis	3
REF 761: Experimental Design	
REF 762: Advanced Regression Analysis	3
REF 893: Advanced Educational Research	3
Complexion and for Destand Desire	
Core Requirements for Doctoral Degree	
	Hours
HPR 701: Advanced Exercise Physiology I	3

Requirements for an Emphasis in Administration and Teachi	ing
	Hours
EDS 620: Supervision and Instruction	
EDA 710: School Law	
HPR 680: Research Techniques	3
HPR 742: Program Design in Human Performance	3
HPR 744: Foundations and Trends in Human Performance & Recreation	
HPR 745: Analysis of Teaching and Supervision in Physical Education	
HPR 780: Graduate Seminar	
HPR 796: Practicum	2-6
HPR 840: Readings	
HPR 898: Dissertation	
Approved Electives	10-15
	Minimum: 60
Requirements for an Emphasis in Exercise Physiology	
	Hours
HPR 703: Advanced Kinesiology	
HPR 706: Cardiovascular Physiology	
HPR 730: Cardiac Rehabilitation	
HPR 780: Graduate Seminar	
HPR 801: Physiology of Aging	
HPR 805: Advanced Exercise Physiology II	
HPR 805L: Advanced Exercise Physiology II Laboratory	
HPR 808: Electrocardiography	
HPR 831: Gross Anatomy	
HPR 831L: Gross Anatomy Laboratory	
HPR 833: Nutrition and Human Performance	3
HPR 834: Advanced Biomechanics	
HPR 898: Dissertation	
Minor Field of Study	12
Chemistry (6-7 hours)	
Biochemistry	
CHE 521: Biochemistry I	3
CHE 522: Biochemistry II	
or .	
Clinical Chemistry	
MTC 504: Advanced Clinical Chemistry I	
MTC 509: Advanced Clinical Chemistry II	4

#### SCHOOL OF HOME ECONOMICS

Minimum: 63

Anita M. Stamper, Director William A. Forsythe, Assistant Director Hattiesburg, MS 39406-5035 (601) 266-4679

The School of Home Economics offers the Master of Science degree for majors in Family and Consumer Studies, Human Nutrition, and Institution Management. These graduate programs are oriented toward meeting career objectives in the areas administered by the School and in meeting the interests and personal goals of the student. All majors offer flexibility in areas so that students can meet specific career goals or specialize in areas of interest to them.

#### Requirements for Admission

Regular admission to the Graduate School for study in the School of Home Economics requires a grade point average of 2.75 and a GRE score of at least 850 (see General Admission Requirements). In a limited number of cases, conditional admission may be granted to applicants who do not meet one of the minimum requirements. In addition to the Graduate School criteria for regular admission, graduate work in the major and minor fields of specialization must be preceded by course work sufficient to satisfy undergraduate requirements or enough related work to indicate

the student's ability to do graduate work in the major and minor fields. Deficiencies in the student's background may be made up by taking and/or auditing recommended undergraduate courses.

#### **Requirements for Graduation**

In the School of Home Economics, the minimum requirement for a master's degree is thirty (30) semester hours. Most majors offer thesis and non-thesis options; the requirements for these differ. Comprehensive exams (both oral and written) may be required in lieu of, or in addition to, completion of a thesis. Consult the specific degree programs for their requirements.

#### MASTER OF SCIENCE PROGRAMS

#### **FAMILY AND CONSUMER STUDIES**

Students earning the Master of Science degree in Family and Consumer Studies may select from two emphasis areas, Family and Consumer Studies and Marriage and Family Therapy. The Family and Consumer Studies emphasis allows students, through flexibility in course selection, to specialize in child development, family relations, family economics and management, or home economics education. Graduates specializing in family economics and management qualify for consumer-related positions in business, industry, and government, including financial institutions, retailers, marketing companies, utility companies, manufacturers, publishers, the Cooperative Extension Service, and similar agencies. Course work for this specialization includes study of the socioeconomic problems of families, consumer economics, and financial problems of individuals and families.

Students may continue their development in the teaching profession by specializing in Home Economics Education courses. For those seeking certification in Occupational Home Economics, HEE 612 (6 hours) and HEE 509 are required. HEE 612 may not be used to fulfill master's degree requirements. Home Economics Education courses focus on program planning, implementation, and evaluation utilizing subject matter areas of consumer economics, curriculum development, family life education, supervision, evaluation, methods and materials, and information technology. These course selections provide professional growth and development primarily for persons employed in the public schools or junior colleges or with the Cooperative Extension Service.

Course selections concentrating in the areas of Family Relations provide a foundation in family systems theory and family life cycle development theory. Specific areas of study include interactions among individuals, groups and societal forces and their impact on personal relationships within the context of the family; family enrichment; family life education; prevention of dysfunction in the family. Graduates prepare for careers in a variety of settings such as juvenile courts, welfare programs, elderly day care programs, family abuse shelters, community colleges, and the Cooperative Extension Service.

Child Development courses focus on the developmental stages of the child and the family; and the impact of social organizations such as group child care and/or preschool on child and family life. Graduates are prepared for employment as child care center teachers or administrators, child development specialists with the Cooperative Extension Service, teachers of child development and family relations in community colleges, and child life specialists with hospitals or clinics.

The emphasis in Marriage and Family Therapy is accredited by the Commission on Accreditation for Marriage and Family Therapy Education of the American Association for Marriage and Family Therapy. The two-year program of study combines academic coursework with supervised clinical experiences involving couples, individuals, and families. The program is designed to focus on the integration of theory, research, and clinical practice throughout family life span development. The contextual and ecological aspects of systemic family treatment are emphasized. The program consists of (1) the conceptual study of family dynamics, family systems and subsystems, communication processes, and developmental family life cycle changes; (2) the application of diagnosis/assessment and treatment process utilizing the specific techniques associated with the major models of system change; (3) the study of human development in the context of the interface of interpersonal and intrapersonal issues, intimacy and gender issues, and ethnic minority issues; (4) instruction related to professional socialization, legal and ethical considerations; (5) the application of research methodology and data analysis to the field of marriage and family therapy; and (6) supervised clinical practice which consists of a minimum of 500 face-to-face contact hours with clients (conducted over a period of one calendar year). Due to the professional nature of the Marriage Family Therapy program, student performance is evaluated at the following major transition points: (1) entry into the clinical component of the program, (2) advancement from each Practicum Level, I-V, (3) and at program completion. Movement through

each transition point requires an endorsement by a majority of the Marriage and Family Therapy faculty. Graduates of the program are prepared to fill family therapy leadership roles in both public and private agencies, hospitals, and industry.

In addition to requirements for admission to the School, the MFT Program requires a personal interview with the Program Director and the Director of Training and emotional stability and maturity as evidenced through at least three letters of recommendation from previous professors or employers.

# Requirements for an Emphasis in Family and Consumer Studies (30 hours non-thesis option, 33 hours thesis option)

All students will take the common core of courses listed and select a set of courses according to their career choice.

Core for all students in degree program	Hours
CD 652 Current Trends and Theories in Child Development	
FAM 650 Advanced Family Systems Theory	
FAM 645 Financial Problems of Families	
HEE 501 Family Life Education REF 601 Research: Its Introduction and Methodology	
KEF 001 Research, its infroduction and methodology	
	15
Select one of the following areas:	
Child Development Area *(select 15-18 hours from listing below)	
CD 550 Administration of Programs for Young Children or	
CD 655 Practicum in Child Care Administration	
CD 552 Child Development Methods and Materials	
CD 650 Advanced Child Development	3
CD 698 (thesis) or selected electives (non-thesis)	
FAM 651 Parents and Children: Problem Resolution	3
*Minimum of 12 hours must have CD prefix.	
"Minimum of 12 hours must have CD prefix.	
The Child and Family Studies area cooperates with the Institute for Disability Studier a concentration area in Developmental Disabilities. Students may earn a certific concentration in Developmental Disabilities by completing 9 semester hours of cours practicum in this area. Some or all of these credit hours may be in addition to the reconcentration in the same overlap may be possible. Students working with their gradual develop the exact program of work for the degree plan. Recommended courses for the concentration are:  CD 598 or FAM 596 Families of the Developmentally Disabled CD or FAM 688 Medical Aspects of Developmental Disabilities CD or FAM 697 Professional Collaboration for Developmental Disability Services CD or FAM 678 Assessment and Intervention with Handicapped Children Birth to Five  Family Studies Area **(select 15-18 hours from listing below)	sework and a quirements te committee
FAM 551 Marriage Adjustment: Communication and Conflict	3
FAM 651 Parents and Children: Problem Resolution	3
FAM 653 Aging and the Family	
FAM 690 Practicum in Family and Consumer Studies	
FAM698 (thesis) or selected electives (non-thesis)	3-0
Other courses from related fields, as approved by graduate committee	
**Minimum of 12 hours must have FAM or CD prefix	
Family Economics and Management Area FAM 690 Practicum in Family and Consumer Studies	6-9
Home Economics Area	
REF 607 Basic Course in Curriculum Development	3
HEE 607 Curriculum Problems in Home Economics	
HEE 698 (thesis) or other HEE prefixes (non-thesis)	
,	

# Requirements for an Emphasis in Marriage and Family Therapy (60 hour Minimum)

	Hours
FAM 550 -Sexuality in the Family	3
FAM 551 -Marriage Adjustment: Communication and Conflict	3
FAM 650 -Advanced Family Systems Theory	
FAM 651 -Parents and Childrens: Problem Resolution	3
FAM 653 -Aging and the Family	3
FAM 655 -Marriage and Family Systems Intervention I	3
FAM 656 -Marriage and Family Systems Intervention II	
FAM 659 -Professional Seminar in Marriage and Family Therapy	
FAM 660 -Assessment in Marriage and Family Therapy	3
FAM 691 -Research in Family and Consumer Studies	3
FAM 790 -Practicum in Marriage and Family Therapy (5 semesters min.)	24
CD 650 -Advanced Child Development	3
Electives	3

#### Requirements for a Minor in Interdisciplinary Gerontology

A student who has been admitted to Graduate School may earn a minor in Interdisciplinary Gerontology by completing a minimum of twelve (12) hours of graduate level courses which have been approved by a gerontology adviser. A practicum in aging is strongly recommended. The courses for the minor may be selected from the following:

\*FAM 553 The Family in Later Life \*FAM 653 Aging and the Family \*FAM 654 Special Topics in Gerontology FAM 690 Practicum PSY 556 Psychology of Aging and Death HPR 552 Gerontology and Therapeutic Recreation HPR 801 Psychology of Aging SOC 524 Sociology of Aging Applied Educational Gerontology ADE 580 Education and the Older Adult **ADE 750** 

SWK 675 Social Work Practice with Persons in Mid and Late Life

NSG 606 Death and Bereavement

#### **HUMAN NUTRITION**

The Master of Science degree in Human Nutrition offers graduates opportunities to pursue careers in basic nutrition science, clinical nutrition or community nutrition. The required course work is designed to provide students with an in depth understanding of basic nutrition, contemporary nutrition issues and research design. Depending on the student's background and interests, appropriate courses in biochemistry, physiology, community health, exercise sciences and psychology, as well as additional courses in clinical or community nutrition, can supplement the required coursework. Students have the opportunity to develop research interests in human, experimental or community nutrition with qualified faculty in each area. Students with appropriate prerequisites may complete the Coordinated Program in Dietetics to become eligible for active membership in The American Dietetic Association and to write the registration exam for Registered Dietitian (R.D.) status.

### Requirements for the Master of Science in Human Nutrition

Thesis (36 hrs)	Non-Thesis (36 hrs)
CHS 540, 6236	CHS 540, 6236
FN 5603	
FN 6932	FN 6932
FN 6643	FN 6643
FN 6302	FN 6302
FN 6312	FN 6312
FN 641 or FN 662	FN 641 or FN 6623
FN 6986	FN 6923
Electives9	Electives12

<sup>\*</sup>Required course

#### INSTITUTION MANAGEMENT

The graduate program in Institution Management is designed for individuals interested in additional course work in food service management, administrative dietetics, hotel management, school food service, restaurant management, or tourism. Students complete the core courses and a thesis or a minor in nutrition, business administration, recreation, or an approved area, and elect courses in their area of specialization with the adviser's approval.

Students with appropriate prerequisites may complete the Coordinated Program in Dietetics to become eligible to write the registration examination given by the American Dietetic Association

upon graduation.

Those selecting the thesis option have the opportunity to work with qualified graduate faculty in research areas in food service, hotel and restaurant, and hospitality management.

Requirements for the Master of Science in Institution Management

Thesis Program Requirements: (33 hours) REF 601, 602 (6 hours)

FSM 674 (3 hours) FSM 693 or HRT 693 (3 hours) FSM 698 (6 hours)

Other related courses (15 hours)

Non-Thesis Program Requirements: (36 hours)

REF 601 (3 hours)

FSM 674, 675, 676 (9 hours) FSM 693 or HRT 693 (3 hours) Minor (12 hours)

Other related courses (9 hours)

#### SCHOOL OF NURSING

Anna M. Brock, Director
Paul N. Gospodarski, Assistant Director,
Graduate Program
Hattiesburg, MS 39406-5095
(601) 266-5639

#### MASTER OF SCIENCE IN NURSING DEGREE PROGRAM

The School of Nursing offers the Master of Science in Nursing (MSN) degree with specialization in Community Health Nursing, Nursing Service Administration, Psychiatric Nursing, Family Nurse Practitioner, and Adult Health.

The purposes of the master's program in nursing are to provide advanced study in nursing practice and role development and to provide a foundation for doctoral study.

#### **Admission Requirements**

In addition to meeting the University of Southern Mississippi requirements for admission to graduate study, the master's program applicant must have:

- 1. Graduated from a National League for Nursing accredited baccalaureate program.
- 2. A 3.0 Grade Point Average (GPA) in undergraduate Nursing courses.
- 3. Completed an introductory course in statistics.
- 4. Physical assessment skills (Community Health Nursing Requirement).
- A minimum composite score of 850 in the verbal and analytical sections of the Graduate Record Examinations (GRE). The applicant must have acceptable scores in each section.
- Registered nursing license.
   Exceptions to the above criteria must be approved by the major adviser, the Director of the School of Nursing, the Dean of the College, and the Dean of the Graduate School.

#### **Academic Progression**

A student must obtain 1) a minimum grade of B in each nursing course; 2) a minimum grade of C in each non-nursing course; and 3) an overall 3.0 GPA. If the grade point average falls below 3.0, the student is placed on conditional status by the School. Failure to attain a 3.0 cumulative grade point average within the next 9 hours of study will result in denied progression in graduate nursing courses.

Students in clinical agencies must adhere to agency guidelines and maintain professional liability insurance.

#### Curriculum:

Forty-two (42) credit hours are required to complete the program: 15 hours in the core, 27 hours in the area of emphasis inclusive of clinical courses, guided electives, and support courses. Additionally, the Family Nurse Practitioner major requires 48 semester hours to complete the degree requirements.

Depending upon enrollment and resources, all nursing emphases may not be available at the Hattiesburg, Gulf Park, and Meridian Campuses.

#### **Emphasis Area:**

The following emphasis areas are available under the existing major:

Community Health Nursing

Community Health Clinical Nurse Specialist

Community Health Administration

Community Mental Health Nursing

Community Health Nurse Educator

Nursing Service Administration

Nursing Administration Management Specialist

Nursing Administration in Community Health Agencies

Nursing Administration in Psychiatric Mental Health Agencies

Nursing Administration in Adult Health Settings

Psychiatric Nursing

Psychiatric Nursing Clinical Nurse Specialist

Psychiatric Nursing Administration

Psychiatric Community Health Nursing

Psychiatric Nurse Educator

Family Nurse Practitioner

Adult Health

Core:	Hours
NSG 519 Computers in Nursing	3
NSG 600 Issues in Nursing and Health Care	
NSG 601 Theory Development in Nursing	
NSG 603 Nursing Research	
NSG 698 Thesis or NSG 692 and Elective	6
	18
Clinical Focus:	
Clinical courses -	18-24
Cognate courses -	6-9
Flectives -	3_9

## MASTER OF SCIENCE PROGRAM FOR GRADUATE OF DIPLOMA AND ASSOCIATE DEGREE NURSING PROGRAMS

In keeping with its commitment to excellence and leadership in nursing, the School of Nursing offers a Master of Science in Nursing degree designed for nurses holding an Associate Degree or a Diploma in Nursing. Associate Degree and Diploma nurses may complete the degree requirements in three and one half years of full time study. Students may also elect to pursue the program of study on a part time basis. Students select a major in nursing on admission.

#### **Admission Requirements:**

- 1. An Associate Degree/Diploma in Nursing from a program accredited by the National League for Nursing.
- 2. Evidence of the fulfillment of legal requirements for the practice of nursing in Mississippi.
- 3. One year of clinical experience. An overall GPA of 2.5 in courses required for admission.
- 4. At least a C in each course applicable to the nursing curriculum (Natural science courses may be repeated only once).
- 5. Proof of immunization against Hepatitis B Virus
- 6. Current CPR Certification.
- 7. Proof of recent health exam.

- Completion of the GRE with a minimum composite score of 850 in the verbal and analytical sections.
- 9. Admission to the Graduate School.

#### **Program Requirements**

The Generic Master of Science in Nursing degree requires a minimum of 94 undergraduate credit hours that includes 30 hours of credit for nursing Validation Exams. The student must also complete 23 hours of upper division nursing courses with a grade of C or better. All candidates for the degree must complete a minimum of 42 semester hours of course work leading to the Master of Science in Nursing degree. Students declare their major at the time of admission to the program. Students seeking admission to the Family Nurse Practitioner Program, must complete 48 semester hours of course work. Students must complete degree requirements including the undergraduate courses, the graduate core courses and the major and support courses. Students must also complete the research component of the degree.

The generic program will lead to the MSN. The articulated program requires the student to complete the entire program of study in order to receive a degree.

Applicants for this program must meet all requirements for graduate admission except the possession of BSN degree.

#### **Financial Assistance:**

Traineeships may be available from federal and state funding sources dependent on the area of study selected. Financial assistance also is available from the Financial Aid Office of the University. Funding resources are subject to change, and payback clauses may be part of the funding agreement.

#### SCHOOL OF SOCIAL WORK

Earlie M. Washington, Acting Director Hattiesburg, MS 39406-5114 (601) 266-4163

The School of Social Work offers two degrees: the B.S.W. degree, a program of preparation for beginning social work practice, offered at the undergraduate level, and the M.S.W., a graduate degree that prepares students for entry into advanced generalist social work practice. The M.S.W. is accredited by the Council on Social Work Education.

Social workers are thoroughly trained professionals who provide services to more people in Mississippi and across the United States than any other professional group. They serve in many places where people need help with their problems in living, including schools, correctional institutions, chemical dependency agencies and hospitals. They work with families, taking a compassionate approach to families in crisis, including family therapy as well as counseling battered spouses and abused children. They offer assistance in arranging for foster care for neglected or abused children or adoption services.

Social workers in medical settings help patients and families cope with the emotional and financial burdens that often accompany illness, aging or death. They assist in arranging follow-up care after hospitalization and serve as a professional liaison between patients, their families and other health professionals. Social workers make valuable contributions to the mental health field, offering inpatient and outpatient therapy, as well as aiding families and patients in use of community resources.

Many social workers find a satisfying career in military service. They offer emotional assistance to members of the armed forces, as well as their families in coming to terms with the unsettled nature of their lives. There is a growing demand for social workers in business and industry to operate employee assistance programs dealing with stress-related problems, interpersonal relationships, chemical misuse and other difficulties that can disrupt the productivity of the employee.

#### MASTER OF SOCIAL WORK

First year students must begin their work in the fall semester. Students are not admitted any other time. Full-time first year students will have concurrent classroom courses and field instruction (internship) the first year. During the fall semester of the second year, students will be in classroom courses only. During the spring semester students will be in an advanced field placement four days each week. Fridays will be spent on campus during this semester. A minimum of sixty (60) credit hours is required for graduation.

#### **Program on Part-time Basis**

The School, in keeping with admissions requirements, offers a part-time educational program designed primarily for employed practitioners in which the first two semesters of classroom instruction may be completed over an extended period of time (up to four years). First year field instruction for part-time students is arranged. The final thirty (30) hours of class and field instruction must be taken as full time students in residence (nine (9) hours is considered full-time residence).

#### Credit by Examination

It is possible for students who meet admission requirements and hold a B.S.W. from an accredited undergraduate social work program to receive credit for a maximum of twelve (12) hours of first year MSW courses through proving mastery of the material offered in those courses. Mastery of the material will be determined by both oral and written examinations. These examinations will be administered in the first two weeks of each semester, in time to allow students to drop and add courses without charge.

#### Requisites for the M.S.W. Degree

Students must have a 3.0 grade average in academic course work and a 3.0 grade average in field practicum.

All required courses must be successfully completed.

A minimum of sixty (60) credit hours is required for graduation in the M.S.W. program.

#### **Admission Requirements**

Applicants to the School of Social Work are selected and admitted without discrimination on the basis of age, sex, race, religion, color, lifestyles, or national origin.

- A. Students, full-time or part-time, are admitted on the basis of the following factors: a bachelor's degree from an accredited college or university; a **minimum** undergraduate grade point average (GPA) of 2.75 on a 4.0 scale; a **minimum combined** score of 850 on the **Graduate Record Examinations** (verbal and quantitative sections); academic background; references; a written personal statement from the applicant; a written response to a case situation, and a report of a faculty member's interview with the student. All of these factors are evaluated by the Admissions Committee. It is the desire of the School to see each applicant prior to completion of the admission process. In most cases, an interview with the applicant by a faculty member is required to support the application process. The faculty member will then submit a report of the interview to the School's Admissions Committee.
- B. Students who wish credit by examination must meet the following additional requirements: hold an undergraduate social work degree from a CSWE accredited program with a GPA of 3.0, and pass appropriate examinations.

The School adheres to the University policies with regard to admission of graduate students on a "conditional" basis. Students with conditional admission are not eligible to transfer credit by examination. The University regulations concerning "conditional admissions" for regular or part-time students are stated in this Bulletin under "Admissions Requirements and Procedures."

All admission requirements must be completed by April 1, of the year prior to the fall semester the student plans to enroll. The Graduate Record Examination is given only at specified times during the year, and there is a delay of about six (6) weeks before the University receives the student's scores after the GRE is taken. Therefore, since GRE scores are required for admission, the applicant should allow sufficient time for the completion of an application.

#### Student Advisement

Each student admitted to the program will be assigned an adviser. The adviser will assist the student in planning a program of study toward the degree, approve the schedule each semester, provide counsel, and sign the application for degree. Advisement is an essential component of the MSW program. Its purpose is to provide counsel, guidance, and support to students in their efforts to achieve their educational goals. When requested or required, the adviser also helps students resolve personal problems that affect the attainment of their educational goals. For further information, contact:

Coordinator of Admissions

The University of Southern Mississippi School of Social Work Box 5114 Hattiesburg, MS 39406-5114

Telephone: (601) 266-4163.

#### MODEL OF REGULAR PROGRAM

Semester I Fall	Hours
SWK 601 Human Behavior I	3
SWK 605 Social Welfare Policy I	3
SWK 608 Generalist Practice I	3
SWK 617 Social Work Research I	3
SWK 641 Field Education I	3
	15
Semester II Spring	
SWK 602 Human Behavior II	3
SWK 606 Social Welfare Policy II	2
SWK 609 Generalist Practice II	3
SWK 634 Diverse Society	2
SWK 637 Social Work Research II	2
SWK 642 Field Education II	3
	15
Semester III Fall	Hours
SWK 635 Management and Administration	Hours
SWK 635 Management and Administration	Hours
SWK 635 Management and Administration	Hours
SWK 635 Management and Administration	Hours
SWK 635 Management and Administration	Hours
SWK 635 Management and Administration	Hours
SWK 635 Management and Administration	Hours
SWK 635 Management and Administration	Hours
SWK 635 Management and Administration	Hours
SWK 635 Management and Administration	Hours 3 3 3 3 3 3 15 6 6 6 3 3
SWK 635 Management and Administration SWK 666 Community Development and Social Planning SWK 674 Social Work Practice with Families SWK 653 Individual and Family Assessment SWK 696 Social Work Practice with Groups  Semester IV Spring SWK 673 Field Education III. SWK 658 Advanced Interventive Methods.	Hours
SWK 635 Management and Administration SWK 666 Community Development and Social Planning SWK 674 Social Work Practice with Families SWK 653 Individual and Family Assessment SWK 696 Social Work Practice with Groups  Semester IV Spring SWK 673 Field Education III. SWK 658 Advanced Interventive Methods. SWK 691 Research Practicum	Hours

Minimum Total Credit Hours: 60

#### MODEL FOR PART-TIME PROGRAM\*

	First Year	Second Year	Third Year
Fall	SWK 601	SWK 608	SWK 641
	SWK 605	SWK 617	
Spring	SWK 602	SWK 609	SWK 642
•	SWK 606	SWK 637	
Summer	SWK 634		
	Fourth Academic Year		
Fall	SWK 635		
	SWK 666		
	SWK 674		
	SWK 653		
	SWK 696		
Spring	SWK 673		
	SWK 658		
	SWK 691		
	Electives (4)		

<sup>\*</sup>The plan is designed for completion in four academic years.

Minimum total of sixty (60) credit hours for graduation based on three calendar years or nine semesters.

#### CENTER FOR COMMUNITY HEALTH

Lynn Cook Hartwig, Director Hattiesburg, MS 39406-5122 (601) 266-5437

The Center for Community Health was created as an organizational focus for expanded activities in community health within the College of Health and Human Sciences. Offerings from the Center include the areas of Health Education, Health Policy and Administration, and Occupational and Environmental Health. The Center offers the Master of Public Health (M.P.H.) degree. The M.P.H. is accredited by the Council on Education for Public Health. The Center serves as a base for interdisciplinary research and demonstration activities in such areas as rural health policy, community programs for the elderly, access to health care for vulnerable populations, disease prevention and health promotion, and occupational health and safety.

Admission to the master's program requires an acceptable score on the **Graduate Record Examinations** (850 combined verbal and quantitative scores), a GPA of 2.75 or higher at the baccalaureate level, and a minimum of an undergraduate minor (or its equivalent) in an appropriate\* field of study. A personal interview with a member of the graduate faculty is highly recommended.

Written and oral comprehensive examinations are required of all graduate students in the master's program.

Requests to take the comprehensive examination must be made in writing the semester prior to administration of the examination. The request should be sent to the Director of the Center, and the following typed information is to be included:

- A. Applicant's name as it appears on official school records \*Specific competencies for admission are determined by each area.
  - B. Social Security number
  - C. Emphasis area
  - Applicant's address and telephone number (during semester in which examination will be taken)

All general Graduate School requirements outlined earlier in this **Bulletin** must be satisfied for students to progress successfully toward degrees. Regardless of degree level pursued, the student is responsible for following all graduate regulations. The student's major professor will assist, but the student is expected to know what is required and to take full responsibility.

### MASTER OF PUBLIC HEALTH (M.P.H.)

Graduates of the M.P.H. program will find career opportunities in all sectors of the health care field including health service delivery organizations, community organizations, federal, state and local health agencies, colleges and universities, voluntary health agencies, consulting firms, industry, and insurance companies. Students will usually take forty-five (45) credit hours. A minimum of thirty-six (36) hours may be approved for those with terminal degrees or considerable experience.

#### M.P.H. Core Requirements

Title tall Cole Reddings	
	Hour
CHS 601 -Community Health Organization and Practice	3
CHS 622 -Epidemiology	
CHS 622 -Epidemiology CHS 623 -Biostatistics	
CHS 655 -Environmental Health	
CHS 525 -Health Administration	
CHS 656 -Social and Behavioral Aspects of Health	3
CHS 611 -Internship	3-9
CHS 792 -Special Problems in Health	
·	
Requirements for Emphasis in Health Education	
CHS 509 -Community Health Education Planning	3
CHS 512 -Measurement and Evaluation	
CHS 720 -Community Organization for Health Education	3
Electives	6-12

internship.

#### Requirements for Emphasis in Health Policy and Administration

CHS 527 -U.S. Health Policy and Policy Analysis	
CHS 657 -Financial Aspects of Health Administration	3
Management/Policy Electives	
Requirements for Emphasis in Occupational and Environmental Health	
Requirements for Emphasis in Occupational and Environmental Teater	
CHS 527 -U.S. Health Policy and Policy Analysis	3
CHS 527 -U.S. Health Policy and Policy Analysis	3
CHS 527 -U.S. Health Policy and Policy Analysis	3
CHS 527 -U.S. Health Policy and Policy Analysis	4 4
CHS 527 -U.S. Health Policy and Policy Analysis	4 4

consultation with their advisor, they may substitute CHS 698-Thesis for six hours of coursework and/or the

### **COLLEGE OF LIBERAL ARTS**

#### Graduate Degrees 1994-1995

Department	Major	Degree
	Master's Level	
School of Commun	nication	
	Communication  Mass Communication Emphasis	Master of Arts Master of Science
School of Library	Speech Communication Emphasis Public Relations and Information Science	Master of Science
ochoor or Elorary	Library and Information Science	Master of Library and Information Science
Anthropology and	Sociology	
	Anthropology	Master of Arts Master of Science
Criminal Justice	Criminal Justice	Master of Arts Master of Science
English	Juvenile Justice Emphasis	
	English Creative Writing Emphasis	Master of Arts
Foreign Languages	s and	
Literatures	Foreign Languages	Master of Arts in the Teaching of Language
	French Emphasis Spanish Emphasis Teaching English to Speakers of Other Languages (TESOL)	
Geography and Ar	Emphasis	
Geography and Ar	Economic Development Geography	Master of Science Master of Arts Master of Science
History		
	History	Master of Arts Master of Science
Philosophy and Re		Master of Auto
Political Science	Philosophy	Master of Arts
Pontical Science	Political Science	Master of Arts Master of Science
	Public Administration Emphasis (MS)	
Speech and Hearin	ng Sciences	Master of Arts
	Speech and Hearing Sciences Audiology Emphasis Speech-Language Pathology Emphasis	Master of Science
	Education of the Deaf Emphasis	

Department	Major	Degree
	Doctoral Level	
Communication		
	Communication	Doctor of Philosophy
English	•	
	English Creative Writing Emphasis	Doctor of Philosophy
History		
•	History	Doctor of Philosophy

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## **COLLEGE OF LIBERAL ARTS**

Glenn T. Harper, Dean Stanley R. Hauer, Associate Dean Hattiesburg, MS 39406-5004 (601) 266-4315

The College of Liberal Arts offers the Doctor of Philosophy, the Master of Philosophy, the Master of Library and Information Science, the Master of Arts in the Teaching of Languages, the Master of Arts, and the Master of Science degrees as outlined on the previous pages.

With the approval of the major professor and the chair of the major department, the student may choose a graduate minor in a cognate field.

Various departments of the College of Liberal Arts also participate with the College of Education and Psychology in programs leading to the Master of Education degree.

For general academic requirements and regulations governing each of these degree programs, see the section on **Academic Requirements**. For **specific** degree requirements, consult the appropriate department.

## SCHOOL OF COMMUNICATION

Gene Wiggins, Director Hattiesburg, MS 39406-5158 (601) 266-5650

The School of Communication offers the Master of Arts, Master of Science, and the Doctor of Philosophy degrees under the joint administration of the participating areas within the Department of Journalism, the Department of Radio, Television, and Film, and the Department of Speech Communication. The Director of Graduate Studies advises all candidates regarding general regulations and requirements and serves as academic adviser until committees are formed and major professors are selected.

Master's and doctoral degree candidates select a concentration and curriculum from among the participating disciplines with the approval of the major professor and committee members. Curricula and requirements for master's candidates majoring in Communication and in Public Relations are outlined below. All graduate courses in Mass Communication; Journalism; Radio, Television, and Film; and Speech Communication are listed under Communication in the course descriptions.

Master's degree candidates in Communication select one of two primary concentrations: (1) speech communication, or (2) mass communication. A separate major is available in Public Relations. Students emphasizing mass communication or majoring in public relations are required to have prior academic training or professional experience in the mass media or public relations practice. Those not meeting the requirement can be admitted into the program but will be required to correct the deficiency without receiving graduate credit for the additional work.

The Doctor of Philosophy degree program is interdisciplinary and is structured in consultation with the student's doctoral committee to serve the student's individual needs. Students select one of two primary concentrations: (1) Mass Communication, or (2) Speech Communication. The program involves study of advanced theories of speech communication and mass communication research design and methodology.

Admission requirements for the School of Communication are the same as those of the University, with the following additions:

Applicants for the master's programs must present a score of at least 900 on the aptitude section of the **Graduate Record Examinations**, with a minimum score of 450 on the verbal portion, and minimum grade point average of 3.0. Applicants for the doctoral program must present a score of at least 1000 on the aptitude section of the **Graduate Record Examinations**, with a minimum of 500 on the verbal portion, and a grade point average of 3.50.

The requirements for conditional admission to the master's program shall be a GRE aptitude score of 750 with a score of 400 on the verbal portion and a grade point average of 2.75. Conditional admission requirements for the doctoral program are the same as that of the University, except the minimum GRE score shall be 900. The first nine hours after conditional admission to all graduate programs must be taken in the School of Communication.

International students must score at least 550 on the TOEFL examination before they can be admitted into any graduate program in the School.

## Master of Arts/Master of Science Thesis Option

Major: Communication Emphasis: Mass Communication

All students pursuing this program in Communication must complete the following requirements:

	Hours
Substantive Core	
MC 607, MC 625	6
Research Methods	
MC 720	3
MC 722, RTF 525, Statistics (any two)	6
Thesis	6
Electives in Mass Communication	

A minimum of thirty (30) semester hours must be completed, including thesis credit. At least eighteen (18) of these hours must be numbered 600 and above. All candidates must take a comprehensive written examination, submit a scholarly thesis, and defend the thesis. In addition to minimum credit and thesis requirements, the candidate for the Master of Arts degree must demonstrate proficiency in an approved foreign language not to be counted toward the credit hours requirement.

## Master of Science Non-Thesis Option

Major: Communication Emphasis: Mass Communication

All students pursuing this program in Communication must complete the following requirements:

	Mours
Substantive Core	
MC 607, MC 625	6
Research Methods	
MC 720	3
MC 722, RTF 525, Statistics (any two)	6
Electives in Mass Communication	18

A minimum of thirty-three (33) semester hours must be completed. At least eighteen (18) of these hours must be numbered 600 and above. All candidates must take a comprehensive written examination.

## Master of Arts/Master of Science Thesis Option

Major: Communication Emphasis: Speech Communication

All students pursuing this program in Communication must complete the following requirements:

The countries purcount and programs as communications must complete the rone wing	Hours
Substantive Core	
SCM 600, SCM 735	6
Research Methods	
SCM 720, Electives*	9
SCM Electives	
Thesis	6
*The research methods electives will be chosen from SCM 721, SCM 722, REF 602, REF 761.	

A minimum of thirty-three (33) semester hours must be completed, including thesis credit. At least eighteen (18) of these hours must be numbered 600 and above. All candidates must take a comprehensive written examination, submit a scholarly thesis, and defend the thesis. In addition to minimum credit and thesis requirements, the candidate for the Master of Arts degree must demonstrate proficiency in an approved foreign language not to be counted toward the credit hours requirement.

## Master of Science Non-Thesis Option

## Major: Communication Emphasis: Speech Communication

All students pursuing this program in Communication must complete the following requirements:

·	Hours
Substantive Core	
SCM 600, SCM 735	6
Research Methods	
SCM 720, Electives*	9
SCM Electives	18
*The research methods electives will be chosen from SCM 721 SCM 722 REF 602 REF	

A minimum of thirty-three (33) semester hours must be completed. At least eighteen (18) of these hours must be numbered 600 and above. All candidates must take a comprehensive written examination.

### Master of Science

## **Major: Public Relations**

All students pursuing a major in Public Relations must complete the following requirements:

	Hours
Substantive Core	
MC 607, MC 621, MC 625	9
Research Methods	
MC 720	3
MC 722, or RTF 525, or Statistics	3
Thesis, major project, or internship*	3-6
Speech Communication/Mass Communication Electives**	
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\*Students seeking the Master of Science degree with a major in Public Relations may choose between a thesis and a non-thesis option. Six hours credit are given for a thesis and three hours for a major project or internship.

A minimum of thirty (30) semester hours must be completed, including thesis, major project or internship. At least eighteen (18) of these hours must be numbered 600 and above. All candidates for the Master of Science degree with a major in Public Relations must pass comprehensive written examinations, and either submit and defend a scholarly thesis, or complete a major project, or serve an approved internship.

Candidates with undergraduate deficiencies must take undergraduate courses to correct the deficiency without receiving graduate credit for the additional course work. Candidates with few undergraduate deficiencies may be permitted by their academic committees to complete a graduate minor pertinent to their area of specialized practice, e.g., social work, public administration, business administration, and criminal justice.

## **Doctor of Philosophy**

A four-course sequence in research design and methodology is required of all doctoral students. The four courses include: MC 625 - Process and Effects of Mass Communication or SCM 735 - Rhetorical Theory; MC/SCM 720 - Introduction to Graduate Research in Communication; and MC/SCM 722 - Communication Research Methods; and either MC 607 - Theories of Mass Communication, or SCM 600 - Communication Theory and Research. Equivalent courses taken at another institution will be accepted, pending approval of the Director of Graduate Studies, the major professor, and the instructor of the course.

The minimum credit requirement for the doctoral degree is fifty-four (54) hours beyond the master's degree or eighty-four (84) hours beyond the baccalaureate degree. The student takes rigorous written and oral examinations and submits and defends a scholarly dissertation pertaining to the area he or she elects to emphasize (see section on General Requirements and Regulations).

Doctoral students may elect an outside minor consisting of twelve (12) hours approved by the major professor and academic committee members. Doctoral students must demonstrate proficiency in basic communication research design and methodology, as well as competency in basic statistics.

<sup>\*\*</sup>Students who did not have undergraduate public relations courses must take JOU 521, 522, and 525.

## SCHOOL OF LIBRARY AND INFORMATION SCIENCE

Joy M. Greiner, Director Hattiesburg, MS 39406-5146 (601) 266-4228

The School of Library and Information Science offers a course of study leading to a Master of Library and Information Science degree. Since the first master's degree in library science was awarded in 1965, the program has continued to grow and develop into a truly comprehensive instructional program for all students who plan to become professional librarians in public, school, academic, or special libraries. For the general University graduate student, the School offers a variety of course offerings for acquiring skill in the scholarly use of library resources as research tools. Finally, the School performs a vital role in the continuing development and expansion of library services at all levels in the State of Mississippi as well as providing continuing education for practicing librarians.

The graduate curriculum in library and information science provides instruction in the following areas of librarianship: information science; reference; cataloging and classification; selection and acquisition; administration; bibliography; non-print media; history of the book, libraries, printing and publishing; and library programs for children and youth.

Providing prospective librarians with professional knowledge and skills for effective library service, however, is not the only objective of the School. The faculty believes that professional education should also be concerned with fostering those attitudes and understandings which will help students develop an appreciation of the changing role of the library in society. The library profession will flourish only as students are prepared to participate intelligently in the process of relating library services to the larger social and cultural needs of contemporary society.

#### Accreditation

The Master of Library and Information Science degree is accredited by the American Library Association. The School is also an institutional member of the American Library Association, Association for Library and Information Science Education, Mississippi Library Association, and the Southeastern Library Association.

## Mission of the School of Library and Information Science

The mission of the School of Library and Information Science is two-fold: (1) to prepare students for professional and paraprofessional roles in librarianship and related areas, and (2) to sensitize students to the changing information needs of a free and open society and to the aims of their chosen profession.

# Goals and Objectives of the Graduate Program of Education in Library and Information Science

#### Goal I.

To introduce master's degree candidates to historic and contemporary intellectual freedom issues, and to foster their commitment to the Library Bill of Rights.

## **Objectives:**

As a result of this program the candidates will be able to:

- A. Discuss ways in which libraries as social institutions have historically advanced freedom of expression;
- B. Discuss ways in which modern libraries advance freedom of expression and promote freedom to information.

### Goal II.

To cultivate in master's degree candidates an understanding of the principles of librarianship, and the requisite professional qualities of reflective thinking, critical and evaluative analysis, and effective communication.

## Objectives.

As a result of this program the candidates will be able to:

- A. Articulate an understanding of professional responsibility and of the educational contribution of librarianship as a service-oriented information profession;
- B. Identify problems and demonstrate creativity and initiative in their resolution;
- C. Identify the significance of the library in the communication process;
- D. Demonstrate an understanding of the librarian's role as mediator in the communication process;
- E. Demonstrate a facility for oral and written communication.

#### Goal III.

To familiarize master's degree candidates with the evolution of libraries and librarianship so that they will understand the historic relationship between society and libraries, and the role of libraries in the dissemination of information and the expansion of knowledge.

## Objectives.

As a result of this program the candidates will be able to:

- A. Examine and evaluate the role that libraries and librarians have played in our own and other cultures:
- B. Examine and evaluate the role of books and all other information transfer devices in the development of human culture;
- C. Identify trends that may be derived from past and present experience;
- D. Identify social challenges to the principles of librarianship, articulate methods for dealing with these challenges, and articulate a commitment to improve the quality of library service in response to the needs of all segments of society.

#### Goal IV.

To provide experiences which will prepare master's degree candidates to perform efficiently in libraries and to work effectively with the public.

## Objectives.

As a result of this program the candidates will be able to:

- A. Identify the informational needs of library communities;
- B. Plan, administer, and evaluate information services for these groups;
- C. Select, organize, create and utilize materials to meet the needs of the library's public;
- D. Apply and evaluate technologies as they are used in the storage, retrieval, and service functions, and in the management of the library.

### Goal V.

To introduce master's degree candidates to modern management theories, and to develop an awareness of the effects of technology on library management.

## Objectives.

As a result of this program the candidates will be able to:

- A. Explain contemporary management theories;
- B. Explain the elements of management theory, including program planning, implementation, and evaluation:
- C. Explain the effects of technology on management.

#### Goal VI.

To demonstrate the value of, and encourage participation in, professional organizations and continuing education.

## **Objectives**

As a result of this program the candidates will be able to:

- A. Explain how participation in professional organizations benefits the individual librarian;
- B. Explain how professional organizations and publications advance the principles of librarianship;
- Explain the value of continuing education and other professional development activities to librarians.

## Goal VII.

To introduce master's degree candidates to theoretical and applied professional research in all areas of librarianship; to develop cognizance of the role of scientific research in building a theoretical knowledge base; and to provide an experience for each student to conduct original research.

## Objectives.

As a result of this program the candidates will be able to:

- A. Explain the role of scientific research and of a theoretical knowledge base in librarianship;
- B. Evaluate reports of theoretical and applied research activities;
- C. Determine appropriate research methodologies and data gathering techniques for given problems;
- D. Complete an original research project.

## **Admission Requirements**

A graduate student in Library and Information Science must meet the general requirements for admission to the University graduate program as outlined elsewhere in the **Graduate Bulletin**, scoring not lower than 850 on the combined Aptitude Section of the **GRE** and a grade point average of 3.00 (figured on an A equals 4.00 scale) for the last two years of undergraduate study to qualify for regular admission. For conditional admission, the School of Library and Information Science adheres to the policies of the Graduate School as stated in the **Graduate Bulletin**. In keeping with University practice and policy, sex, religion, race, physical disability, creed, and age play no role in the consideration of applicants for admission to the M.L.I.S. degree program.

In addition to the application forms which must be submitted to the Admissions Office of the University, the School of Library and Information Science requires the submission of a personal questionnaire, plus two letters of recommendation (on forms supplied). One letter of recommendation should be from a librarian. These forms may be obtained by writing to the School of Library and Information Science, not to the Graduate School. Personal interviews with applicants will also be conducted whenever possible.

#### THE MASTER OF LIBRARY AND INFORMATION SCIENCE DEGREE

Candidates for the Master of Library and Information Science (M.L.I.S.) degree must earn a minimum of thirty-eight (38) semester hours of credit with a 3.00 cumulative grade point average. Eighteen (18) of these hours must be at the 600 level of courses. A minimum of six (6) hours may be elected from the offerings of other departments within the University. A total of no more than nine (9) semester hours of transfer work and non-degree work may be applied toward the degree.

The program of study for students will be individualized, taking into consideration previous academic backgrounds, experience, and career objectives. All programs of study must be planned with the counsel of a faculty adviser and approved by the Director of the School of Library and Information Science.

## I. M.L.I.S. Degree Requirements

LIS 501, 505, 511, 605, 636, 651, 668

Electives (15 hours)

Master's project (2 hours)

If near equivalencies of any of the above required courses were taken on either the undergraduate or graduate level at an accredited institution with a grade of B or above, other electives may be substituted. Courses at the 500 level may also be waived by special examination or by the Director of the School.

## II. Course Requirements for School Library-Media Specialist Certification at the Master's Level

Students who plan to use the master's degree in Library and Information Science for Class AA certification should complete the following courses in addition to those listed above:

LIS 508, 517, 518, 525; 506 or 580 or 581

or 586 or 587 or 591 or 692 or 694

The following professional education courses must be completed to satisfy certification requirements in the State of Mississippi: REF 601 and REF 607. (LIS 668 may be taken in lieu of REF 601.)

Students seeking certification at the master's level are also advised that they may be required to complete more than 38 hours to meet all degree and certification requirements, especially if they do not hold a Class A Certificate in Library and Information Science. Students should see their adviser or the Director of the School of Library and Information Science for further information concerning certification requirements.

## III. Dual Master's Degree in History and Library and Information Science

The History Department and the School of Library and Information Science offer a dual master's degree program leading to the Master of Arts in History and the Master of Library and Information Science degrees. The total number of hours required for both programs is 54—30 for the M.L.I.S. and 24 for the M.A. in History.

Students in the combined program must complete the following requirements:

1.Twenty-four (24) hours in history.

2. Thirty (30) hours in library and information science. The following required courses: LIS 501, 505, 511, 636, and 605;

Either LIS 651 or LIS 647;

LIS 631 or 638 or 646 or 649 or 666;

LIS electives: 6 hours:

LIS 691 which will confer three (3) of the 6 hour thesis requirement

For the history requirements in this program, students should refer to the Department of History section of this bulletin.

## DEPARTMENT OF ANTHROPOLOGY AND SOCIOLOGY

James G. Flanagan, Chair Hattiesburg, MS 39406-5074 (601) 266-4306

The Department of Anthropology and Sociology offers graduate work leading to the master's degree in anthropology and a minor in the master's and doctor's degree programs of other departments.

#### MASTER'S PROGRAM IN ANTHROPOLOGY

The Department of Anthropology and Sociology offers programs within the College of Liberal Arts leading to the Master of Arts or Master of Science degree in Anthropology. The minimum combined GRE test score required for regular admission to the graduate program in Anthropology is 900. Also required is a minimum verbal score of 400. Requirements for these degrees are as follows:

#### Master of Arts

A minimum of thirty-three (33) semester hours, eighteen (18) of which must be earned at the 600 level or above; and completion of three of the four seminars in anthropology (ANT 621, 631, 641, 651) including the seminar in the student's sub-field of specialization. No more than six (6) hours of field methods courses (ANT 516, 536) and no more than nine (9) hours of independent study courses (ANT 692, 792) will be applied toward the degree. Also required are proficiency in one foreign language; successful completion of a comprehensive examination; and submission of an approved thesis.

### Master of Science

A minimum of thirty-three (33) semester hours, eighteen (18) of which must be earned at the 600 level or above; and completion of three of the four seminars in anthropology (ANT 621, 631, 641, 651) including the seminar in the student's sub-field of specialization. No more than six (6) hours of field methods courses (ANT 516, 536) and no more than nine (9) hours of independent study courses (ANT 692, 792) will be applied toward the degree. Also required are proficiency in statistics; successful completion of a comprehensive examination; and submission of an approved thesis.

The Department of Anthropology and Sociology also offers a graduate minor in Anthropology for students in the master's and doctor's degree programs of other departments.

## DEPARTMENT OF CRIMINAL JUSTICE

Tyler H. Fletcher, Chair Hattiesburg, MS 39406-5127 (601) 266-4509

The Department of Criminal Justice offers courses leading to a Master of Arts degree, a Master of Science degree, and a graduate minor in the master's and doctoral degree programs of other departments.

The Gulf Park campus is the site of a substantial part of the graduate curriculum. Graduate students should consider residence there, but commuting from the Hattiesburg campus is also a reasonable option.

### MASTER'S PROGRAMS

## **Master of Arts Degree**

The Master of Arts degree in Criminal Justice consists of a minimum of thirty-three (33) hours of criminal justice course work, or a minimum of twenty-four (24) hours of criminal justice course work with nine (9) hours of additional course work in an approved minor. Either sequence also requires six (6) hours of CJ 698, Thesis, for a total of thirty-nine (39) hours. The Master of Arts degree program is divided into the fields noted below. CJ 520 and CJ 625 are required in all fields. A student will be required normally to select a minimum of four courses from a field concentration and a minimum of one course from each of two other fields in order to gain an appreciation of the interaction of criminal justice system components. A foreign language competency is required.

## **Master of Science Degree**

The Master of Science degree in Criminal Justice consists of a minimum of thirty-nine (39) hours of criminal justice course work, or a minimum of thirty (30) hours of criminal justice course work with nine (9) hours of additional course work in an approved minor area, plus successful completion of a written comprehensive examination. The degree is designed to provide specialization in a designated field to meet professional needs. CJ 520 and CJ 625 are required in each option.

## **General Requirements for Admission**

- (A)Applicants who have an undergraduate major in Criminal Justice and non-degree graduate students must have achieved a grade point average of 3.0 overall and in their criminal justice courses for regular admission.
- (B)Applicants must have achieved a score of at least 850 points total on the quantitative and verbal portions of the **Graduate Record Examinations** for the Master of Science degree and 900 for the Master of Arts degree. If a student is given conditional admission, he or she

- must have at least 750 on the GRE. In the case of international applicants, at least 400 points of the required total must be scored in the verbal part of the GRE.
- (C)In cases where considerations other than grade point averages indicate, the department may, at its discretion, grant conditional admission to undergraduate criminal justice majors and non-degree graduate students in Criminal Justice with a GPA of less than 3.0 but more than 2.75 overall and in criminal justice courses.
- (D)Students with other than a criminal justice undergraduate major will be granted conditional admission if the department is satisfied that their grade point average overall and in their particular major indicates the potential to perform acceptably in the program.
- (E)All admissions of students with other than a criminal justice undergraduate major or strong professional training in criminal justice will be conditional upon the completion, with a 3.0 average, of up to twelve (12) hours of undergraduate criminal justice courses consisting of CJ 330 and either CJ 341 or CJ 360, plus one other course approved by the student's adviser.

## **Criminal Justice Fields (Required Courses)**

#### I Criminal Justice

I CI IIII II G astice			
CJ 520	CJ 563	CJ 533	CJ 660
CJ 530	CJ 570	CJ 640	
CJ 526	CJ 625	CJ 630	
CJ 560	CJ 631	CJ 650	
II. Juvenile Justice			
CJ 520	CJ 560	CJ 650	PSY 533
CJ 550	CJ 561	CJ 660	PSY 612
CJ 551	CJ 571	PSY 523	PSY 614
CJ 563	CJ 625	PSY 532	PSY 738

(Selection of the Juvenile Justice specialty entails completion of forty-eight (48) hours of course work in order to comply with state policy and federal court orders governing state employees of the Department of Youth Services. An included minor of eighteen (18) hours of course work is required in psychology, counseling psychology, or social work.)

## III. Graduate Minor in Criminal Justice

The graduate minor in Criminal Justice consists of at least twelve (12) hours of graduate course work for the master's or the doctorate. Approval of the minor and the courses is at the discretion of the major adviser.

## DEPARTMENT OF ENGLISH

David M. Wheeler, Chair Hattiesburg, MS 39406-5037 (601) 266-4319

The Department of English offers programs leading to the Doctor of Philosophy and Master of Arts degrees. Within the framework of these degree programs, students may specialize in the traditional areas of English and American Literature, in Creative Writing, or Composition/Rhetoric.

General academic and admission requirements for all graduate degrees are set forth in another section of this **Bulletin** and general departmental requirements are listed below. Specific requirements for the various specializations, e.g., Creative Writing, etc., are described in information sheets available from the Department of English, Box 5037 Southern Station. Students interested in applying for financial support (assistantships) should contact the Department of English.

### The Doctor of Philosophy

The Doctor of Philosophy degree offered by the Department of English is designed to prepare students for careers as scholars and teachers. This degree is taken after the candidate has earned a master's degree and meets all University and departmental admission requirements. Applicants should score a minimum of 1000 on the GRE Aptitude Test (verbal plus quantitative). Other departmental requirements follow.

- 1. A minimum of fifty-four (54) semester hours beyond the master's degree including courses in bibliography and methods and literary criticism.
- 2. A qualifying examination after one full semester's work.

- Proficiency in two foreign languages or one foreign language and nine graduate hours in an approved area other than English.
- 4. A written comprehensive examination.
- 5. Presentation and defense of dissertation.

Precise details of the doctoral program are available from the Department of English.

#### The Master of Arts

Applicants for the Master of Arts degree should score a minimum of 1000 on the GRE Aptitude Test (verbal plus quantitative). Requirements for the Master of Arts degree include the following:\*

- 1. A minimum of thirty (30) semester hours of graduate credit including at least twelve (12) hours in an area of concentration such as English Literature, American Literature, or Creative Writing. A minimum of eighteen of the thirty hours must be taken at the 600-level or above with six in the area of concentration; however, English 714, 715, and 791 may not be used to satisfy this requirement.
- 2. ENG 506 (with approval, another linguistics course may be substituted) and ENG 640.
- 3. Foreign Language proficiency. (See the appropriate section of the Bulletin.)
- 4. Thesis (six hours credit).
- 5. An oral examination on the thesis and the related area of concentration.
- \*Candidates desiring AA certification must include, in addition, REF 601 and REF 607.

## DEPARTMENT OF FOREIGN LANGUAGES AND LITERATURES

Sam L. Slick, Chair Hattiesburg, MS 39406-5038 (601) 266-4964

The Department of Foreign Languages and Literatures offers a program leading to the Master of Arts in the Teaching of Languages (MATL) degree. Within the MATL, students usually concentrate on one of three emphasis areas: French, Spanish, or Teaching English to Speakers of Other Languages (TESOL). The focus of the MATL is on developing and enhancing the knowledge and skills in language, language acquisition, and language instruction that are essential for both effective teaching and successful learning. The MATL is offered year-round, with the option of completing the program through Summer Only registration.

The MATL Program, with the addition of REF 607, meets the requirements for AA certification for those holding a current Mississippi teaching certificate in French or Spanish. The department also offers a program of study for the ESL Endorsement to a current Mississippi teaching certificate in any area. Please contact the director of the MATL Program for details.

## **Admission Requirements**

The department requires a combined score of 850 on the verbal-quantitative portions of the GRE General Test, or a minimum score of 1125 on the common and area examinations of the National Teacher Examinations (NTE), or a total of at least 1965 for the three tests (Communication Skills, General Knowledge, and Professional Knowledge) of the Core Battery of the NTE, or a total score of at least 39 on the Miller Analogies Test. See the Academic Requirements section of the Graduate Bulletin for other general requirements. International students whose native language is not English must also score at least 560 on the Test of English as a Foreign Language (TOEFL), with no section score lower than 54.

## **General Program Academic Requirements**

All students are expected to complete the following requirements:

- 1. A total of thirty-three (33) hours of graduate level courses, including eighteen (18) hours in courses numbered 600 or above.
- 2. FL 561, FL 663, FL 664, FL 665 and REF 601.
- 3. A seminar within the emphasis area (FRE 641, SPA 641, or TSL 641).
- 4. A practicum tailored to the teaching experience of each student (FL 694).
- 5. For students in the TESOL emphasis, ENG 501.
- For students in the Spanish or French emphasis areas, a minimum of 15 hours of graduatelevel courses in the specific language.
- 7. A language proficiency requirement, as determined by departmental policy, within the

specific emphasis area. In addition, students in the TESOL emphasis whose first language is English must also meet a foreign language requirement by completing nine (9) hours of conversational foreign language study or equivalent with an average of "B" or better.

- 8. A comprehensive examination.
- 9. The presentation and defense of a paper or project.

## DEPARTMENT OF GEOGRAPHY AND AREA DEVELOPMENT

Jesse O. McKee, Chair Hattiesburg, MS 39406-5051 (601) 266-4729

The Department of Geography and Area Development offers the following graduate degree programs:

- 1. Master of Arts and Master of Science in Geography
- 2. Master of Science in Economic Development

The department features coursework in geography, economic development, and urban and regional planning. The degree programs in geography stress concentrations in atmospheric science, economic development, urban and regional planning, population and cultural systems, cartographic techniques, and geographic information systems, balanced by staff specialties in a variety of other systematic and regional areas. All programs in geography emphasize the application of technical skills and the development of a research capability in a particular concentration.

The student is held responsible for all graduate regulations. The student's major professor will help in any way possible, but the student is expected to know what is required and to take full responsibility. General academic requirements are explained fully earlier in the Bulletin; departmental requirements are listed below.

## MASTER'S PROGRAMS IN GEOGRAPHY

Programs falling under both the M.A. and M.S. are designed to prepare students for further graduate study and for employment in such areas as planning, area development, business, government service, or teaching. Participation in an internship program is generally available to all departmental graduate students, but particularly to those pursuing a master's planning concentration in geography or the economic development degree. Prospective students should be prepared to spend up to two years completing all degree requirements; progress may be accelerated by taking advantage of summer sessions.

The department requires a score of 850 on the **Graduate Record Examinations**, and a 3.00 grade point average over the last two years of full-time undergraduate course work. Financial aid will be awarded on a competitive basis.

## **Curriculum Requirements**

- 1. A minimum of thirty-six (36) semester hours in graduate level geography courses with at least eighteen (18) hours of work in courses at the 600-level. With the approval of the major professor, the student has an option of taking (outside the department) up to twelve (12) semester hours of cognate courses within the minimum hourly requirements. Courses prefixed with GHY, ED, or PLG may be used in any combination to satisfy the minimum required hours.
- 2. GHY 610 and 680. These courses are required of all students.
- 3. Demonstrated proficiency in cartography and statistical/quantitative methods. Proficiency is generally established (on an individual basis) by evidence of satisfactory completion of course work in these areas sometime in a student's academic career, at either the graduate or undergraduate level.
- 4. All students in the M.A. program will prepare a thesis. Students in the M.S. program have the option of preparing a thesis or a paper of a professional quality. The thesis will confer six (6) semester hours credit to be counted as part of the total minimum hourly requirement for the degree. The paper, which will normally be the end product of work begun in a seminar, will confer no credit hours toward the minimum required for the degree.

5. An oral examination on the student's academic program is required. Students in the M.S. and M.A. programs writing a thesis will take an oral defense of the thesis. Students in the M.S. program taking the option of preparing a paper of professional quality will have the paper reviewed by the department faculty and will present it orally before the combined faculty.

## **Other Specific Requirements**

In addition to the above, the following requirements are specified for those students working respectively, for either the Master of Arts or the Master of Science degrees in Geography.

#### **Master of Arts**

A reading knowledge of one approved foreign language. Proficiency in a foreign language may be established either by: (1) completion of nine (9) semester hours of an approved foreign language with a grade of C or better or (2) by satisfactorily passing the Princeton Examination in that language. Transfer credit will be evaluated on an individual basis. All evaluation related to this requirement will be accomplished by the University's Department of Foreign Languages.

#### Master of Science

Demonstrated proficiency in statistics or in a microcomputer usage. Proficiency is normally obtained by satisfactorily completing a two-course sequence selected in consultation with the departmental adviser. Typical sequences to establish proficiency in statistics are introductory statistics and GHY 615. Sequences for computer proficiency are CSS 240 and GHY 516 or 517 or GHY 516 and 517. Undergraduate or transfer credit will be evaluated by the department on an individual basis.

## MASTER OF SCIENCE PROGRAM IN ECONOMIC DEVELOPMENT

Ronald J. Swager, Director Hattiesburg, MS 39406-5051 (601) 266-4729

The purpose of the Economic Development program is to assist students in acquiring professional competence in the concepts, skills, working tools, and creative approaches essential to those involved in the field of economic development, whether at the national, regional, or community level.

Admission to regular student status requires a minimum score of 850 (verbal and quantitative combined) on the **Graduate Record Examinations** (GRE) or 400 on the **Graduate Management Admissions Test** (GMAT). A minimum undergraduate grade point average of 3.00 (4.00 scale) also is required for regular graduate status.

## **Curriculum Requirements:**

- 1.Successful completion of a minimum of forty-two (42) semester hours in graduate level courses as follows:
  - a.Twenty-one (21) hours of prescribed core courses selected from the following: ED 551, 651, 652 (3 hours), 653, 654, 655, 656, and 657.
  - b.Demonstrated proficiency in statistics and microcomputer usage. Undergraduate or transfer credit will be evaluated on an individual basis.
  - c.At least three (3) hours of Internship (ED 691).
- 2.Successful completion of an oral and/or written comprehensive examination.
- 3. Completion of one of two curriculum options as follows:
  - a. Thesis option
    - 1) At least twelve (12) hours of pre-approved elective courses.
    - 2) Six (6) hours of Thesis (ED 698) and successful oral defense of the thesis.
  - b. Non-Thesis option
    - 1) At least fifteen (15) hours of pre-approved elective courses.
    - 2) Successful completion (B or better) of ED 658, to be taken in the last year of the candidate's program.

## DEPARTMENT OF HISTORY

Orazio A. Ciccarelli, Chair Hattiesburg, MS 39406-5047 (601) 266-4333

The Department of History participates in programs leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy.

## **General Regulations:**

The student is held responsible for following all graduate regulations. The student's major professor will help in any way possible, but the student is expected to know what is required and to take full responsibility. The procedure is explained fully in another part of this **Bulletin**.

## **MASTER'S PROGRAMS**

## **Admission Requirements:**

The department requires a combined score of 850 on the verbal-quantitative portions of the **GRE General Test** with a minimum score of 450 on the verbal section. See the **Academic Requirements** section of this **Bulletin** for other general requirements. In addition to the Graduate School criteria for regular admission, students whose native language is not English must also score at least 550 on the TOEFL Examination. The department presumes that applicants who have fulfilled these requirements possess an adequate knowledge of written and spoken English. If, upon their arrival at the University, it is determined that they do not possess an adequate command of English, the department reserves the right to require appropriate remedial courses.

### Master of Arts

All students are expected to complete the following requirements:

- A total of thirty (30) semester hours in history with eighteen (18) hours in courses numbered over 600.
- 2. HIS 710 at its first offering by the department.
- 3. HIS 740 for those concentrating in U.S. History; 742 for those in European History.
- 4. A reading knowledge of one foreign language.
- 5. A thesis which will confer six (6) hours credit within the minimum hourly requirements.
- 6. During the fall semester of the second year, the student will take a comprehensive written examination.

#### Master of Science

All students are expected to complete the following requirements:

- 1. A total of thirty (30) semester hours with eighteen (18) hours of work in courses numbered
- 2. HIS 710 at its first offering by the department.
- 3. HIS 740 or HIS 742 depending upon area of concentration.
- 4. A thesis (optional).
- 5. During the spring semester of the first year, the student will take a comprehensive written examination.

## Master of Science for Secondary School Teachers

In addition to the general admission requirements, applicants must have a Class A teaching certificate in social studies. This program, designed specifically for secondary school teachers, meets the requirements for AA certification. In lieu of the regular M.S. requirements outlined above, students must complete the following requirements:

- 1. A total of thirty-three (33) semester hours with eighteen (18) hours of work in courses numbered above 600.
- 2. Twenty-four (24) hours in history which must include HIS 509, 510, 558, 710, either 740 or 742, and one Readings Seminar.
- 3. An outside minor of nine (9) hours which must include REF 601, REF 607, and a course in either world economic geography or political science.

 After satisfactory completion of the course work, the student will take a comprehensive written examination.

#### **Fields**

The Department of History offers the following areas of concentration for the Master of Arts and Master of Science degrees:

- I. United States History
- II. European History (This area may include Continental European History and British History)
- III. Latin American History
- IV. Asian History

All M.A. students and those M.S. students not seeking AA certification must, on the comprehensive examination, demonstrate proficiency in one primary area of concentration and one secondary area. Two members of the examining committee will represent the primary area and one member will represent the secondary area. United States History and European History may be selected as either primary or secondary areas. Latin American and Asian History may be selected only as a secondary areas. The nature and scope of the material to be included from each area will be determined by the student with the agreement of his/her graduate committee.

The M.A. student should successfully complete fifteen (15) hours of course work in the primary area and six (6) hours in the secondary area in addition to History 710 and the six hours of thesis work.

The M.A. thesis must be written in the primary area of concentration. A student may write a thesis in Latin American and Asian History if permission to do so is granted by the department.

The M.S. student not seeking AA certification should take eighteen (18) hours of course work in the primary area and nine (9) hours in the secondary area in addition to History 710.

Students planning to pursue a doctoral degree must write a thesis and should enroll in the M.A. program.

## Dual Master's in History and Library and Information Science

In cooperation with the School of Library and Information Science, the Department of History offers a combined program leading to two master's degrees: Master in Library and Information Science and Master of Arts in History. Students will pursue both degrees simultaneously, and neither degree will be awarded until the entire program is completed. Students who withdraw from the Dual Master's program in favor of one of the two disciplines will be bound by the degree requirements of that discipline. The combined program includes thirty (30) hours in library and information science and twenty-four (24) hours in history for a total of fifty-four (54) hours. Students in the combined program must complete the following requirements:

- 1. Thirty (30) hours in library and information science.
- 2. Twenty-four (24) hours in history, at least fifteen (15) of which must be in courses at the 600 level or above.
- 3. HIS 710 at its first offering by the department.
- 4. HIS 740 or 742
- 5. One of the following seminars: HIS 712, 716, 749, or 780.
- 6. A reading knowledge of one foreign language.
- A thesis which will confer six (6) hours credit, three in history and three in library and information science.
- 8. A comprehensive written examination administered by a three-member committee representing both disciplines and given after satisfactory completion of the course work and thesis.

Students should refer to the Library and Information Science section of this bulletin for further details.

#### DOCTORAL PROGRAM

## **Admission Requirements**

The department requires a minimum grade point average of 3.5 on all graduate work and a combined score of 1050 on the verbal-quantitative portion of the **GRE General Test.** Exceptions to these requirements may be made for those students who have received Master of Arts degrees from the University of Southern Mississippi, provided they receive a GRE score of 1000, a unanimous recommendation by their Master of Arts committees, and approval by a majority of the members of this department. Students so accepted will be classified "conditional," which status is removed by achieving a 3.5 average in twelve (12) hours work during the first two semesters. All applicants are

also required to submit at least three letters of recommendation, a statement of career objectives (500 to 1,000 words), and an example of written work (thesis or seminar paper).

A minimum of eighty-four (84) semester hours of course credit beyond the baccalaureate degree, which includes a minimum of two research seminars, HIS 710, and HIS 740 and HIS 742 must be taken by all students. All doctoral students will take a qualifying examination during their second semester of residence.

## **Major and Minor Requirements**

The department offers the Doctor of Philosophy degree in U.S. History and in European History Since 1789. Candidates seeking a doctorate in U.S. History must demonstrate proficiency in all of American History. In addition, they must demonstrate proficiency in either European History 1789-1870 or European History Since 1870. Doctoral candidates in U.S. History must also demonstrate proficiency in one of the following fields: Medieval, Latin American, British History 1485-1760, British History Since 1760, one of the European fields not selected above, or a specialized field such as Russian History with the consent of the major professor and graduate committee. They may also develop an outside minor of twelve (12) semester hours in one of the social sciences or humanities.

Candidates seeking a doctorate in European History must major in the period of Europe Since 1789. They must demonstrate proficiency in either U.S. History to 1877 or U.S. History Since 1877. Doctoral candidates in European History are also required to demonstrate proficiency in one of the following fields: Medieval, Latin American, British 1485-1760, Britain Since 1760, one of the American fields not selected above, or a specialized field such as Russian History with the consent of the major professor and graduate committee. An outside minor of twelve (12) semester hours in one of the social sciences or humanities is optional. Minor fields are selected after consultation with the candidate's major professor and graduate committee.

## Language Requirement

Each prospective candidate for the doctoral degree must demonstrate proficiency in two foreign languages. Students should have already completed one of the foreign language requirements prior to admission into the Ph.D. program. The second language must be completed by the end of the second year of doctoral study.

#### **Doctoral Committee:**

The student's program will be directed by a five-member graduate committee, consisting of two persons from the major field, two from the department minors, and one representing the outside minor. This committee will approve the dissertation prospectus and conduct the comprehensive examination, which is normally administered during the third year of study. Additional details are available from the Department of History.

## Dissertation

A dissertation is expected to be a mature and competent piece of writing, embodying the result of significant and original research on a subject chosen by the candidate and approved by the major professor and the graduate committee.

Upon completion and approval of the dissertation, the candidate is expected to stand satisfactorily a final examination on the dissertation and the field in which the dissertation lies.

## DEPARTMENT OF PHILOSOPHY AND RELIGION

Forrest E. Wood, Chair Hattiesburg, MS 39406-5015 (601) 266-4518

The Department of Philosophy and Religion offers a course of study leading to the Master of Arts degree with a major in Philosophy, and a graduate minor in either Philosophy or Religion.

#### MASTER'S DEGREE PROGRAM

In addition to the general admission and academic requirements for all graduate programs as set forth in this **Bulletin**, candidates for the Master of Arts degree with a major in Philosophy may choose either the research thesis option or the applied thesis option:

## A. Research Thesis Option

- 1. A total of thirty (30) semester hours of credit, with at least eighteen (18) hours of that work in courses numbered 600 and above.
- 2. A research thesis, for which the student receives six (6) hours credit toward the thirty (30) total required hours.
- 3. A comprehensive examination, normally taken after the completion of all formal course work but before the thesis is officially begun. The comprehensive examination is intended to test the student's general competence in philosophy.
- 4. An oral examination on the completed thesis. During the oral examination, the student will be expected to be able to explain and defend the ideas presented in the thesis.
- 5. A reading knowledge of one foreign language.
- 6. Optional Minor: With the approval of the director of graduate studies, a student may have a minor (including religion), consisting of nine (9) semester hours in a (single) field which is related to the student's philosophical interests. Three (3) semester hours of that minor may then be counted toward the thirty (30) total required hours.

## B. Applied Thesis Option

- 1. A total of thirty-three (33) semester hours of credit with at least eighteen (18) hours in courses numbered 600 and above.
- 2. An applied thesis which demonstrates the application of philosophical thought to a specific issue, problem or debate. The student will receive six (6) hours of credit for this applied thesis.
- After satisfactory completion of the course work, the student must take a comprehensive examination.
- 4. An oral exam must be taken on the completed applied thesis.
- 5. A reading knowledge of one foreign language.
- 6. Optional Minor: With the approval of the director of graduate studies, a student may have a minor (including religion), consisting of nine (9) semester hours in a (single) field which is related to the student's philosophical interests. Three (3) semester hours of that minor may then be counted toward the thirty (30) total required hours.

For regular admission, the department requires a combined score of 850 on the verbalquantitative portions of the **GRE General Test** with a minimum score of 450 on the verbal section. See the Academic Requirements of this **Bulletin** for other general requirements.

In addition to the Graduate School criteria for regular admission, students whose native language is not English must also score at least 550 on the TOEFL Examination. The department presumes that applicants who have fulfilled these requirements possess an adequate knowledge of written and spoken English. If, upon the student's arrival at the University, it is determined that he or she does not possess an adequate command of English, the department reserves the right to require appropriate remedial courses.

Students determined to have deficiencies in their undergraduate program will be required to remedy the deficiencies.

## DEPARTMENT OF POLITICAL SCIENCE

Ronald G. Marquardt, Chair Hattiesburg, MS 39406-5108 (601) 266-4310

#### MASTER'S DEGREE PROGRAM

## Requirements for Regular Admission to the Master's Program:

- Before beginning graduate level course work in Political Science, the student must have completed at least nine (9) hours of political science courses at the undergraduate level and earned at least a 3.0 average for all the political science courses he or she has taken at the undergraduate level.
- 2. Have a 2.75 grade point average for the last two years of the student's undergraduate studies.
- Have scored at least 850 on Graduate Record Examinations for the composite mathematics and verbal sections with at least 425 on the verbal section.

#### Master of Arts

Requirements for the Master of Arts degree include thirty (30) semester hours of course work, including a thesis. A reading knowledge of one foreign language is also required.

#### Master of Science

Requirements for the Master of Science degree include: thirty-three (33) semester hours of course work, including an outside minor of nine (9) hours. A thesis is optional.

## Master of Science with an Emphasis in Public Administration

Requirements for the Master of Science with an emphasis in Public Administration include: twenty-four (24) semester hours of course work in public administration and political science and a minor of nine (9) hours in an administrative area. A thesis is optional.

#### Course Requirements in the Major

Graduate students who expect to receive the Master of Arts degree will select three fields in Political Science in which to concentrate their course work. Graduate students who expect to receive the Master of Science degree will, in addition, select an outside minor, with the advice and consent of their committee.

The fields of Political Science and the courses in each field are:

Political Theory and Methodology

520, 521, 525, 720, 721

American Government and Politics

501, 502, 504, 505, 506, 507, 508, 509, 700, 710

International Relations

531, 532, 535, 730, 731

Comparative Government and Politics

550, 551, 552, 556, 557, 558, 559, 597, 750, 793

**Public Administration** 

571, 572, 573, 574, 770

Public Law

580, 581, 582, 584, 585, 588, 589, 781

### **Comprehensive Examination**

A written and oral comprehensive examination will be given at or near the end of the course work on the three fields of concentration and on the minor, if applicable.

## **Courses Accepted from Other Departments**

The following courses will be accepted as political science for purposes of completing a major or minor if approved by the student's adviser.

ECO 501; HIS 512, 545, 546, 556

## DEPARTMENT OF SPEECH AND HEARING SCIENCES

Stephen E. Oshrin, Chair Hattiesburg, MS 39406-5092 (601) 266-5216

The Department of Speech and Hearing Sciences offers programs leading to the Master of Arts and the Master of Science degrees. Emphasis is possible in three principal areas: (1) speech-language pathology, (2) audiology, and (3) education of the deaf.

New students are accepted by the Department of Speech and Hearing Sciences for the master's program in Speech-Language Pathology, Audiology, or Education of the Deaf prior to each registration period. Students must have regular admission status to register for practicum courses.

Potential graduate students should refer to other sections of the **Bulletin** for information regarding admission requirements as set forth by the Graduate School. Regular admission to the master's programs is based upon the previous academic records, scores on the **Graduate Record Examinations**, and recommendations. The size of the graduate program is limited by accreditation standards and admission is made on a competitive basis. Minimum requirements for regular admission are a combined score of 850 on the aptitude phase of the **GRE**, a grade point average of 2.75 (where A equals 4.0) for the last two years of undergraduate study, and a grade point average of at least 3.0 on undergraduate courses in Speech and Hearing Sciences.

Students who do not qualify for regular admission may be admitted on conditional status if space allows. Conditional students may only take nine (9) hours during their first semester and are required to take additional coursework for graduation. In addition, a student whose initial admission is on a conditional or non-degree basis may register for no more that one hour of clinical practicum during any semester of their graduate program. Conditional students whose grade point average is less than 3.0 after the first nine (9) hours will be dropped from the program.

A major in Speech and Hearing Sciences at the master's level requires a minimum of forty-five (45) semester hours. The Master of Arts degree requires a thesis, three semester hours of clinical practicum, no less than nine three-semester hour courses, and the successful completion of a comprehensive examination. The master's comprehensive examination is the National Examination in Speech-Language Pathology and Audiology; the passing score for the 1993-94 academic year is 600. The Master of Science degree requires three semester hours of clinical practicum and no less than eleven three-semester hours courses. A thesis is optional for the Master of Science degree.

## Master's Degree with Emphasis in Audiology

The master's degree with an emphasis in audiology is a clinical degree designed to meet the academic and practicum requirements for the Certificate of Clinical Competency in Audiology awarded by the American Speech-Language-Hearing Association. The following courses are required: SHS 528, 601, 621, 623, 625, 688, 698 or 692, 701, 722, 723, 724, 726.

## Master's Degree with Emphasis in Education of the Deaf

The program leading to the master's degree with an emphasis in education of the deaf is individualized to the needs of the student. Specialization in education of the deaf may be pursued in a number of areas including pre-primary, elementary (grades 1-8), secondary, secondary special subject, or a specialty area. Selection of specialization areas is governed by the candidate's background, interests, and employment objectives.

The master's degree program enables a student to qualify academically for a master's degree teaching certificate. However, some states may impose other requirements prior to an individual's obtaining compensation at the master's level. Mississippi requires a teacher to have two years of experience before being compensated at the master's degree level; thus a person holding a master's degree but with no teaching experience must be paid at the bachelor's level until two years' experience has been obtained.

Requirements differ from state to state and it is the responsibility of the student to be aware of these differences.

## Master's Degree with Emphasis in Speech-Language Pathology

The master's degree with emphasis in speech-language pathology is a clinical degree designed to meet the academic and practicum requirements for the Certificate of Clinical Competence in

Speech-Language Pathology awarded by the American Speech-Language-Hearing Association. The following courses are to be taken by candidates for the master's degree in this emphasis area: SHS 513, 516, 518, 519, 601, 642, 694, or 695, 687, 702, 712, 716, 719.

A student in speech-language pathology must complete practicum in three different settings. Off-campus sites must be approved by the faculty adviser, and students must have a minimum grade point average of 3.0 before beginning off-campus practicum.

#### **ACCREDITATION**

The master's degree programs in Speech-Language Pathology and Audiology are accredited by the Educational Standard Board, and the USM Speech and Hearing Clinic is accredited by the Professional Standards Board. Both accreditations are by the American Speech-Language-Hearing Association, and are recognized by the Council on Post-Secondary Accreditation and the U.S. Office of Education.

The master's degree program with emphasis in Education of the Deaf is certified by the National Council for Accreditation of Teacher Education (NCATE). This certification is reciprocal among approximately 40 states.

## ADMISSION REQUIREMENTS FOR INTERNATIONAL STUDENTS

In addition to meeting the requirements for admission stated in this **Bulletin**, international students are required to submit a TOEFL score of 560 and a total score of 850 on the verbal and quantitative portions of the **GRE**.

## **COLLEGE OF SCIENCE AND TECHNOLOGY**

## Graduate Degrees 1994-95

Department	Major	Degree
	Master's Level	
School of Engineering Techn	ology	
	Engineering Technology	Master of Science
Biological Sciences		
	Biological Sciences Biological Sciences Emphasis Environmental Biology Emphasis Marine Biology Emphasis Microbiology Emphasis Molecular Biology Emphasis	Master of Science
Chemistry and Biochemistry	meneral storegy surprises	
	Chemistry Chemistry Emphasis Biochemistry Emphasis	Master of Science
Computer Science		
and Statistics	G	3.5
	Computer Science Emphasis Computational Science Emphasis	Master of Science
Geology		
	Geology Geology Emphasis Marine Science Emphasis	Master of Science
Marine Science, Center of	•	
Mathematics	Marine Science Biological Marine Science Empha Chemical Marine Science Emphas Geological Marine Science Empha Physical Marine Science Emphasi	sis asis
	Mathematics	Master of Science
	Mathematics Emphasis Computational Science Emphasis	
Medical Technology		24 60 1
DI ' IA	Medical Technology	Master of Science
Physics and Astronomy	Di:	Master of Science
	Physics Physics Emphasis Computational Science Emphasis Polymer Physics Emphasis	Master of Science
Polymer Science	, , , , , , , , , , , , , , , , , , ,	
	Polymer Science	Master of Science
Science Education		
	Science Education Biology Education Emphasis Chemistry Education Emphasis Earth Science Education Emphasi Physics Education Emphasis	Master of Science

Department	Major	Degree
	<b>Doctoral Level</b>	
School of Mathematical School		
D' 1 ' 10'	Scientific Computing	Doctor of Philosophy
Biological Sciences	D: 1 : 10 :	0.00111
	Biological Sciences	Doctor of Philosophy
	Biological Sciences Emphasis	
	Environmental Biology Emph Marine Biology Emphasis	asis
	Microbiology Emphasis	
	Molecular Biology Emphasis	
Chemistry and Biochemist		
•	Chemistry	Doctor of Philosophy
	Chemistry Emphasis	•
	Biochemistry Emphasis	
Marine Science		
	Marine Science	Doctor of Philosophy
Polymer Science	D.1. 0.1	D CDIII I
Caiana Eduardian	Polymer Science	Doctor of Philosophy
Science Education	Science Education	Doctor of Education
	Science Education	Doctor of Philosophy
	Biology Education Emphasis	Doctor of Timosophy
	Chemistry Education Emphasis	is
	Earth Science Education Empl	
	Physics Education Emphasis	
	Non-Teaching Program	
	Computer Science Emphasis	
	Mathematics Emphasis	

## COLLEGE OF SCIENCE AND TECHNOLOGY

Stephen A. Doblin, Dean
C. Howard Heiden, Associate Dean
R. D. Ellender, Assistant Dean
Hattiesburg, MS 39406-5165
(601 266-4883

The College of Science and Technology offers degrees as outlined on the previous two pages. Please check each department/school section for specific admission, course, and graduation requirements as well as for descriptions of areas of specialization. In addition, present and prospective students should consult earlier sections of this **Bulletin** for the general Graduate School requirements and regulations that apply to all graduate programs and degrees.

The Center for Science Education, in cooperation with the Departments of Biological Sciences, Chemistry & Biochemistry, Computer Science & Statistics, Geology, Mathematics, and Physics & Astronomy offers the M.S., Ed.D., and Ph.D. degrees in Science Education with areas of specialization as indicated in the college's graduate degrees listing. These units also cooperate with the College of Education and Psychology to offer the course work to support the M.Ed. and Ed.D. in Secondary Education with various science and mathematics specialization areas.

The College offers an interdisciplinary minor in Environmental Science. Interested students may obtain a listing of the available courses from the chair of their department or graduate committee.

The faculty of the College of Science and Technology have organized numerous specialized centers and institutes, several of which address interdisciplinary issues. Brief descriptions of the principal ones follow.

### CENTER FOR COAL PRODUCT RESEARCH

David L. Wertz, Director Hattiesburg, MS 39406-5043 (601) 266-4701

The Center for Coal Product Research (CCPR) was organized in 1985. It exists as a loose group of university scientists whose specialties range across the spectrum of coal science from microbiology to analytical chemistry. Coal product characterization research has been the constant theme in the Center. CCPR is now collaborating with scientists at several national laboratories and offers the X-ray characterizations as well as chromatographic and mass spectral analysis, environmental electron microscope analysis, surface area analysis, microbial beneficiations, and toxic metals studies. CCPR has been used effectively by the Mississippi Research Consortium (MRC) to secure U.S. Department of Energy funds for graduate traineeships.

## CENTER FOR MACROMOLECULAR PHOTOCHEMISTRY AND PHOTOPHYSICS

David Creed, Coordinator Hattiesburg, MS 39406-5043 (601) 266-4714

This Center was established in 1992 to promote closer cooperation and synergism amongst those faculty interested in the technologically important area of polymer photochemistry. The Center has mainly a coordinating function, particularly in such activities as inviting visiting speakers to the campus, continuing a program of in-house seminars and research discussions, promoting ties with industry, facilitating cooperative research projects, and purchasing and maintaining common research equipment. Faculty from the Department of Chemistry and Biochemistry, Polymer Science, and Physics and Astronomy currently participate in Center activities.

## CENTER FOR MOLECULAR AND CELLULAR BIOSCIENCES

Robert C. Bateman, Coordinator Hattiesburg, MS 39406-5043 (601) 266-4707

The Center is composed of scientists with expertise in the disciplines of biochemistry, microbiology, molecular biology and molecular genetics. The Center facilitates research in these areas by means of a weekly Journal Club, which reviews the current literature, and the Distinguished Scientists Seminar Series, which brings world-renowned researchers to the Hattiesburg campus. In addition, the Center provides a forum for interaction among graduate and undergraduate students working in the laboratories of the participating faculty. Faculty currently associated with the Center are members of the Department of Biological Sciences or the Department of Chemistry and Biochemistry.

### INSTITUTE OF SURFACE COATINGS

Shelby F. Thames, Director Hattiesburg, MS 39406-0076 (601) 266-4080

The Institute of Surface Coatings supports and coordinates research in coatings technology. The institute is an integral part of the College of Science and Technology and functions in concert with the Department of Polymer Science.

## MISSISSIPPI POLYMER INSTITUTE

Robert K. Schlatzer, Director Hattiesburg, MS 39406-0076 (601) 266-4868

The Mississippi Polymer Institute was authorized by the Mississippi Legislature in 1983. The purpose of the Institute is to conduct research designed to increase the utilization of Mississippi raw materials in polymers and to support the rapidly growing polymer industry in Mississippi. The institute is an integral part of the College of Science and Technology and functions in concert with the Department of Polymer Science.

## SCHOOL OF ENGINEERING TECHNOLOGY

R. A. Cade, Director Hattiesburg, MS 39406-5137 (601) 266-4895/4896

### MASTER OF SCIENCE IN ENGINEERING TECHNOLOGY

The School of Engineering Technology offers a program leading to the Master of Science in Engineering Technology with specialization in Construction, Electronics/Computer Systems, and Industrial/Manufacturing Technology. A minimum of thirty-six (36) hours of graduate course work is required of which six (6) may be thesis or three (3) may be project credits. Advanced study in industrial use of computers includes Computer Aided Drafting (CAD), Computer-Aided Manufacturing (CAM), Computer Integrated Manufacturing (CIM), construction scheduling and estimating, and robotics. Electronics and computer systems courses focus upon the introduction and implementation of state-of-the-art technology. Students are encouraged to develop degree plans which include technical electives in management, computer science, mathematics, environmental science, and related academic disciplines to prepare themselves for leadership roles in high technology industries.

## **Admission Requirements**

For regular admission, students must have an undergraduate degree from an ABET accredited program or from a closely related program with a minimum undergraduate GPA of 2.75 (on a scale of 4). In addition, applicants must have a minimum score of 950 on the aptitude section of the GRE. Students whose native language is not English must achieve a TOEFL score of 575 or more. Exceptions to the requirements for regular admission can be made for educationally disadvantaged students.

Conditional admission may be granted to students who do not meet requirements for regular admission. Students admitted on a conditional basis may be required to complete additional course work and must have a minimum GPA of 3.0 on the first nine hours of graduate courses prior to being granted regular admission.

## **Course Work and Degree Requirements**

In addition to the degree requirements established by the Graduate School, students earning the Master of Science in Engineering Technology must satisfy the degree requirements listed below.

- Prior to the completion of more than nine hours of graduate work, development of a thirtysix hour degree plan approved by a faculty advisor and the School of Engineering Technology Graduate Coordinator.
- Selection of a Graduate Committee comprised of three members of which two must be members of the graduate faculty of the School of Engineering Technology during the first year of graduate study.
- 3. Completion of a minimum of six School of Engineering Technology core courses selected from the following list:
  - ACT 526, ACT 592, BCT 554, BCT 555, BCT 558, BCT 576, BCT 577, BCT 578, BCT 592, CET 501, CET 520, CET 571, CET 572, CET 577, CET 578, CET 592, CET 672, CET 692, EET 512, EET 561, EET 592, EET 692, ENT 510, ENT 520, ENT 530, ENT 570, ENT601, ENT 620, ENT 650, ENT 692, IET 505, IET 506, IET 507, IET 508, IET 509, IET 510, IET 540, IET 541, IET 560, IET 580, IET 592, MFG 610, MFG 620, MFG 630, MFG 640, MFG 641, MFG 650, MFG 660, MFG 692, MET 510, MET 520, and MET 592.
- 4. Students who elect to prepare a thesis should enroll in MFG 691, MFG 697, and MFG 698, or ENT 691, ENT 697, and ENT 698. Students who select the project option should enroll in ENT 699 for project credit.
- Satisfactory performance on a comprehensive examination, which is normally administered during the final semester of graduate work, is required for graduation.
- 6. Students must maintain a cumulative GPA of 3.0 based on all graduate courses completed.

## SCHOOL OF MATHEMATICAL SCIENCES

Grayson H. Rayborn, Director Hattiesburg, MS 39406-5165 (601) 266-4739

The School of Mathematical Sciences comprises the Departments of Computer Science and Statistics, Mathematics, and Physics and Astronomy. In addition to the degree programs offered by the departments separately, they cooperate through the School of Mathematical Sciences to offer master's degrees with emphasis in computational science and, at the Stennis Space Center, the Doctor of Philosophy in Scientific Computing.

#### EMPHASIS IN COMPUTATIONAL SCIENCE

Students seeking this emphasis for a M.S. degree from any of the three participating departments will complete the common core by taking three of the four courses from each of the following departmental offerings:

### **Computer Science and Statistics**

CSC 513 Algorithms

CSS 515 Mathematical Statistics I

CSC 635 Computer Graphics

CSC 636 Modeling and Simulation

#### Mathematics

MAT 560 Numerical Analysis I

MAT 605 Ordinary Differential Equations

MAT 606 Partial Differential Equations

MAT 610 Numerical Linear Algebra

### Physics and Astronomy

PHY 551 Physical Applications of the Fourier Transform

PHY 555 Fluid Dynamics

PHY 603 Statistical Physics

#### PHY 606 Methods of Mathematical Physics

The student must complete an additional nine (9) semester hours in the department which awards the degree as well as meet other requirements imposed by that department. To determine which nine (9) semester hours are needed and what other degree requirements must be met, the student should consult the department from which he or she wishes to receive the degree.

## DOCTOR OF PHILOSOPHY IN SCIENTIFIC COMPUTING

## **Admission Requirements**

Students expecting regular admission to the program should hold a master's degree in computer science, mathematics, physics, or a closely related field; possess a grade point average of at least 3.5 on all graduate work attempted; and score at least 1000 on the combined verbal and quantitative sections of the **Graduate Record Examination**.

## **Course Requirements**

A minimum of fifty-four (54) graduate semester hours beyond the master's is required for the degree. Students are expected to possess a reasonable proficiency at the undergraduate level in computer science, mathematics, and physics. Students not proficient may be required to take additional courses. All students in the program are required to complete a core curriculum consisting of the following courses:

SC 710 Computational Methods for Physical Systems

SC 720 Mathematics for Scientific Computing I

SC 721 Mathematics for Scientific Computing II

SC 730 Parallel Algorithms

SC 740 Seminar (must be taken twice)

Other course requirements depend upon individual needs and are selected with the advice of the student's research director and doctoral committee.

## Other Requirements

Students must meet the requirements of the Graduate School of The University of Southern Mississippi. They are required, additionally, to pass an examination covering the core curriculum, to submit a formal prospectus (research proposal) that has been approved by the doctoral committee, and to present an acceptable copy of the dissertation to the doctoral committee at least fourteen (14) calendar days prior to the defense of the dissertation. This defense will take place at an advertised research seminar, open to members of the University community.

## The Comprehensive Examination

To remain in good standing in the program each student, upon completion of the core curriculum, must take and pass a comprehensive examination. The examination, which is administered in the spring and fall of each year, consists of four sections, each section lasting from two to four hours. Each of three of the sections will cover one of the corresponding areas in the core curriculum, and will be prepared for all students by program faculty. A fourth section will be prepared by each student's committee and will cover the student's area of concentration. Students must register for the examination two months prior to the examination date and will have one, and only one, additional opportunity to pass the examination, retaking only those sections of the examination which they failed to pass at the first sitting. The opportunity to try the examination a second time must be exercised no later than the corresponding semester in the year immediately following the first attempt. Students failing to pass all sections of the examination after the second try will be dismissed from the program.

## DEPARTMENT OF BIOLOGICAL SCIENCES

B. L. Middlebrooks, Chair Hattiesburg, MS 39406-5018 (601) 266-4748

The Department of Biological Sciences offers graduate degrees with emphases in environmental biology, marine biology, microbiology, and molecular biology. BSC courses cross-listed as MAR courses are generally taught at the Gulf Coast Research laboratory (GCRL) at Ocean Springs, MS. GCRL faculty may function as a student's major professor.

Regular admission to the **Master's Degree Program** requires a score of at least 1000 on the aptitude section (verbal plus quantitative) of the **Graduate Record Examination** and a grade point average of 3.0 or higher on undergraduate work in biological and physical science courses. Regular admission to the **Doctoral Program** requires a score of at least 1000 on the aptitude section of the **Graduate Record Examinations**, and a grade point average of 3.5 or more on all previous graduate work.

Both master's and doctoral applicants are required to submit a statement of their research interests and career goals as part of the application. Applicants must also request two letters of reference to be sent to the Graduate School. Because more qualified applicants are received than can be accepted, minimum criteria are not necessarily sufficient for admission. Applications for admission for the fall and spring semesters will be reviewed by March 15 and September 15, respectively. All applications received after these dates will be considered if space is available, or will be placed in consideration for the next term. Applications for teaching assistantships will be considered beginning March 15.

#### MASTER'S DEGREE PROGRAM

A minimum of thirty (30) graduate hours is required for this degree. Students must meet the general requirements set forth by the Graduate School of the University of Southern Mississippi. The following are major additional requirements:

- (1) Complete interviews with the Biological Sciences faculty by the end of the first semester.
- (2) Arrange for a major professor or temporary faculty sponsor by the end of the second semester.
- (3) Establish a three-member graduate thesis committee once a major professor and research area are chosen.
- (4) Submit a research prospectus approved by the graduate thesis committee.
- (5) Pass a written and/or oral comprehensive examination.
- (6) Present an acceptable copy of a thesis to the graduate thesis committee ten days prior to a public defense of the thesis at a research seminar presented at an advertised meeting.

## **DOCTORAL PROGRAMS**

A minimum of eighty-four (84) graduate hours beyond the bachelor's degree or a minimum of fifty-four (54) graduate hours beyond the master's degree is required. Students must meet the general requirements set forth by the Graduate School of The University of Southern Mississippi. The following are major additional requirements:

- Arrange for a major professor or temporary faculty sponsor by the end of the second semester.
- (2) Establish a five-member doctoral committee by the beginning of the third semester.
- (3) The doctoral committee will consider the student's academic record and interview the student at a committee meeting to assess the student's ability to pursue additional graduate work by the end of the third semester of enrollment. This assessment fulfills the requirement for a qualifying examination as determined by the Graduate Council of the University as stated in this Bulletin.
- (4) Establish a program of study by the end of the fourth semester of enrollment in the doctoral program.
- (5) Pass a comprehensive examination consisting of written and oral sections that is administered by the doctoral committee. The comprehensive examinations should be taken by the end of the third year (sixth semester) of enrollment in the doctoral program.
- (6) Submit a formal prospectus (research proposal) to be approved by the doctoral committee.
- (7) Present an acceptable copy of the dissertation to the doctoral committee ten days prior to a public defense of the dissertation at a research seminar presented at an advertised meeting.

## DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

David L. Wertz, Chair Hattiesburg, MS 39406-5043 (601) 266-4701

The requirements of the Graduate School for applicants wishing to enter either the Master of Science degree program or the Doctor of Philosophy degree program within the department are used by the department. In addition a score of 1000 or above on the verbal plus quantitative parts of the **Graduate Record Examination** is required for regular admission to the graduate program. Exceptions can be made to this policy for educationally disadvantaged students who otherwise have outstanding credentials. Students whose native language is not English must achieve a score of 590 or above in the TOEFL exam.

### MASTER OF SCIENCE DEGREE PROGRAM

The Department of Chemistry and Biochemistry offers the Master of Science degree with specialization in analytical, inorganic, organic, physical, and/or biochemistry. The M.S. programs jointly emphasize area course work and research/thesis and require a minimum of thirty (30) hours.

Placement examinations to identify deficiencies and to indicate remedial studies to remedy these deficiencies, participation in the seminar program, and a familiarity with computer programming are required for the M.S. degrees, along with specific but flexible coursework programs. Completion of a master's comprehensive examination in the student's area of specialization and a one-semester residency period after completion of the comprehensive are required in each program.

#### DOCTOR OF PHILOSOPHY DEGREE PROGRAM

The Department of Chemistry and Biochemistry offers the Doctor of Philosophy degree with specialization in analytical, inorganic, organic, physical, and/or biochemistry. The Ph.D. programs emphasize excellence in research. Qualified students holding a bachelor of science are encouraged to enter directly into the doctoral program. Individuals who are adequately prepared may take the qualifying examination at the beginning of their first semester of graduate work, but in no case can it be postponed beyond the second semester of graduate work.

The Ph.D. programs require eighty-four (84) graduate hours beyond the bachelor's degree or fifty-four (54) graduate hours beyond the master's degree. Specific course requirements depend upon individual needs and are selected with the advice of the student's research director and doctoral committee.

Among other requirements are:

- (1) Completion and oral defense of a Research Prospectus;
- (2) Completion of a Ph.D. Comprehensive Examination;
- (3) Participation in the seminar program;
- (4) a. Proficiency in two foreign languages judged acceptable by the Department and the Graduate School, or
  - b. Proficiency in one foreign language and a nine (9) hour minor of courses outside the department, the hours for which do not apply towards the degree, or
  - c. Proficiency in one foreign language and in statistics or computer science.
- (5) Completion of a substantial research project and successful oral defense of a dissertation.

## DEPARTMENT OF COMPUTER SCIENCE AND STATISTICS

Frank K. Nagurney, Chair Hattiesburg, MS 39406-5106 (601) 266-4949

The Department of Computer Science and Statistics offers the Master of Science degree in Computer Science and a Masters Degree in Computer Science with an Emphasis in Computational Science. Requirements for the Emphasis in Computational Science and the Ph.D. in Scientific Computing may be found in the School of Mathematical Sciences. For the M.S. degree in Computer Science, a minimum of thirty-three (33) hours of graduate work is required. Of these hours at least 21 must be computer science courses (non-thesis/project) numbered 600 or above. In addition a student will complete either a thesis (6 hours) or a project (3 hours) in computer science.

The masters program is designed to provide a fundamental understanding of theoretical and applied computer science which will allow the student to begin exploring special topics and state-of-the-art subjects. It will prepare a student for advanced applications, development, and research positions in industry or for doctoral level studies.

In addition to meeting the entrance requirements set forth by the Graduate School of the University of Southern Mississippi, requirements for regular admission include an undergraduate GPA of at least 2.75/4.0 and a **Graduate Record Examinations** Score in excess of 1000 (verbal plus quantitative). Conditional admission may be granted to students with an undergraduate GPA between 2.5 and 2.75 provided they attain a score of at least 1000 on the GRE. Conditional admission may be granted to students with a GRE score less than 1000 provided they have an undergraduate GPA of 3.50 or higher. Conditional or regular admission to the computer science master's program will be recommended, as appropriate, by the computer science graduate admissions committee.

Students not meeting the minimum requirements for regular admission are encouraged to submit additional information which documents their potential for doing graduate work in computer science. This would include industrial work experience and training and graduate work already completed. Students may submit GRE scores no more than twice.

A student applying for admission will normally have a B.S. degree from a computer science or closely-related program. Minimum coursework required for admission includes the equivalent of CSC 101, 102, 203, 204, 205, 306, 307, 308 and any three out of courses CSC 309 through CSC 415, CSC 616, MAT 560, MAT 561 (see the USM **Undergraduate** and **Graduate Bulletins** for course descriptions) and mathematics through integral calculus, basic probability, discrete math, and linear algebra.

For students who do not come from an undergraduate program where the courses clearly equate with the USM courses, the computer science graduate admissions committee will review a student's transcript and decide what, if any, deficiencies can be met with undergraduate CSC/MATH courses. A student will not be granted regular admission to the computer science graduate program until those deficiencies are met. See the general policies of the Graduate School for further requirements of conditional admission for students.

Credit will NOT be given toward the master's degree for any course taken to meet deficiencies, admission requirements, or for undergraduate prerequisite courses.

The student must select a three-person advisory committee. The chair of this committee must be from the Department of Computer Science and Statistics (one member may be from outside the Department of Computer Science and Statistics).

## Requirements for graduation consist of:

- (1) Completion of prerequisites.
- (2) Completion of 33 hours of graduate course work where 15 hours are selected from the 8 course core of CSC 616, 620, 623, 624, 626, 629, 632 and 633. The remainder of classwork must come from a combination of non-selected core courses, Computer Science elective courses, Computer Science related graduate level courses from other departments (with the approval of the student's graduate committee) and a thesis or project.
- (3) Satisfactory completion of a thesis (6 hours credit) or a project (3 hours credit).
- (4) Satisfactory completion of a final comprehensive examination.

The department also awards an M.S. degree with an emphasis in computational science. A degree plan for this emphasis area must include a common core of courses taken from the departments of Computer Science, Mathematics, and Physics. Details on the common core are specified in the computational science emphasis area listed under the School of Mathematical Sciences. Nine (9) additional hours of Computer Science courses must be taken.

#### Requirements for graduation consist of:

- (1) Completion of at least 36 hours of graduate work
- (2) Completion of the Computational Science core courses listed under the School of Mathematical Sciences in this Graduate Bulletin.
- (3) Satisfactory completion of a comprehensive examination.

## DEPARTMENT OF GEOLOGY

Daniel A. Sundeen, Chair Hattiesburg, MS 39406-5044 (601) 266-4526

The Department of Geology participates in programs leading to the Master of Science degree in Geology. A minimum of thirty (30) graduate hours is required, eighteen (18) of which must be in courses numbered 600 or above. For the Master of Science degree, the student must complete an original research program, submit and defend a thesis to the department; a thesis committee which supervises these activities is established when the student is formally admitted to a degree candidacy. The GRE advanced test in geology is desirable but is not a requirement for admission. A minimum score of 1000 on the combined total of the Aptitude Section of the Graduate Record Examination (Verbal and Quantitative) will be used as a guideline for admission as a regular graduate student for the Masters degree in Geology. Students who score less than 1000 on the combined total of Aptitude Section of the GRE may be considered for either conditional or non-degree graduate status as outlined in an earlier section.

Students following programs leading to the Master of Science degree in Geology will be required to take a summer field course if they did not have such a course as undergraduates (this stipulation may be waived, upon application, on account of physical disability).

The department in cooperation with the Center for Marine Science offers an interdisciplinary emphasis area in marine geology which includes courses in biological, chemical, and physical marine science taught on the Hattiesburg campus and at SSC.

## CENTER FOR MARINE SCIENCE

D.G. Redalje, Acting Director John C. Stennis Space Center Stennis Space Center, MS 39529 (601) 688-3177

The Center for Marine Science is located at the John C. Stennis Space Center (SSC) on the Mississippi Gulf Coast near Bay St. Louis, MS. Graduate level education and research programs are offered in the four core areas of marine science (biological, geological, and physical oceanography and marine chemistry.) The Center is composed of regular faculty drawn from the Department of Marine Science and the Gulf Coast Research Laboratory. The Center also cooperates with other departments in the College of Science and Technology and scientists affiliated with NRL, NOAA, and other agencies at SSC to provide state-of-the-art research and educational opportunities in marine science.

Although the Center is primarily an interdisciplinary graduate research program, a selected number of undergraduate courses in the four subdiscipline areas of biological, geological and physical oceanography and marine chemistry are also offered. Most of the Center's undergraduate courses are taught during the summer semester at the Gulf Coast Research Laboratory campus. MAR 151 (a general curriculum natural science laboratory elective) is offered on the campus in Hattiesburg as well as at SSC.

The best preparation for students interested in pursuing graduate work in marine science would be to develop a strong working knowledge in calculus, applied mathematics, statistics, the basic sciences (biology, chemistry, geology, physics) and engineering. Some experience with computers is also highly recommended. We realize that not all students will have gained the ideal background for pursuing a M.S. or Ph.D. in marine science. Deficiencies will normally be made up during the student's first year.

#### MASTER'S DEGREE PROGRAM

### **Admission Requirements**

In addition to the general admission and academic requirements for all graduate programs as set forth in this **Bulletin**, regular admission to the Master's program in Marine Science requires a minimum score of 1000 on the **Graduate Record Examination** (verbal plus quantitative), a minimum grade point average of 3.0 for the last two years of undergraduate study, three letters of recommendation and a letter of intent expressing personal academic and research goals to the Center Director. A minimum score of 550 is required on the Test of English as a Foreign Language (TOEFL) for applicants whose native language is other than English. For students wishing to be

considered for graduate assistantships for the academic year beginning in the fall semester, application materials should be received by the Department no later than March 1.

## **Requirements for Graduation**

A total of 34 hours of graduate level courses with a minimum GPA of 3.0 must be completed in order to fulfill the Master of Science degree requirements. All entering graduate students must complete the four core courses generally by the end of their first year in residence. Students advance to candidacy for the M.S. degree by completing all the core courses with a grade of B or better and successfully passing the department qualifying examination which is administered after the student has completed the core courses. A graduate student can accumulate no more than two C's. Other program course requirements include six (6) hours of Thesis and at least one (1) hour of Seminar in Marine Science. The required courses account for 23 of the total 34 hours; the remaining 11 hours (courses numbered 600 and above) must be chosen by the student from a list of elective courses approved by the department. More information on degree requirements and additional course listings can be obtained by writing to the Director.

Required	l Courses:	ours
MAR 501	Biological Oceanography	3
MAR 501L	Biological Oceanography Laboratory	1
	Marine Chemistry	
MAR 541L	Marine Chemistry Laboratory	1
	Physical Oceanography	
MAR 561L	Physical Oceanography Laboratory	1
MAR 581	Geological Oceanography	3
MAR 581L	Geological Oceanography Laboratory	1
MAR 689	Seminar in Marine Science	1
MAR 698	Thesis	6
	Approved Electives	11

#### DOCTOR OF PHILOSOPHY DEGREE PROGRAM

The Center for Marine Science offers a Doctor of Philosophy in Marine Science with specialization in a wide range of marine science fields, including biological, geological and physical oceanography and marine chemistry. Other areas of specialization are available through the Center's association with researchers at the Gulf Coast Research Laboratory (GCRL). The Ph.D. program emphasizes excellence in research. Qualified students holding either a bachelor's or master's degree in a relevant field of science, mathematics or computer science are encouraged to apply for admission to the Ph.D. program.

Students must meet the general requirements set forth in the **Graduate Bulletin** of The University of Southern Mississippi. The Ph.D. in Marine Science requires eighty-four (84) graduate hours beyond the bachelor's degree or fifty-four (54) graduate hours beyond the master's degree.

### **Admission Requirements**

In addition to the general admission and academic requirements for all graduate programs as set forth in this **Bulletin**, regular admission to the Ph.D. program in Marine Science requires a minimum score of 1000 on the **Graduate Record Examination** (verbal plus quantitative), a minimum 3.0 GPA for the last two years of undergraduate study, and minimum 3.5 GPA for all previous graduate work, three letters of recommendation and a letter of intent expressing personal academic and research goals to the Center Director. A minimum score of 550 is required on the Test of English as a Foreign Language (TOEFL) for applicants whose native language is other than English. For students wishing to be considered for graduate assistantships for the academic year beginning in the fall semester, application materials should be received by the Department no later than March 1.

### **Program Requirements**

Required	Courses:	Hours
MAR 501	Biological Oceanography	3
MAR 501L	Biological Oceanography Laboratory	1
MAR 541	Marine Chemistry	3
MAR 541L	Marine Chemistry Laboratory	1
MAR 561	Physical Oceanography	
MAR 561L	Physical Oceanography Laboratory	1
MAR 581	Geological Oceanography	
MAR 581L	Geological Oceanography Laboratory	1
MAR 689	Seminar in Marine Science	2
MAR 898	Dissertation	
	Approved Elective courses	12*

\*MAR 691, MAR 791 - Directed Research in Marine Science, MAR 697, MAR 797 - Independent Study and Research, MAR 698 - Thesis and MAR 898 - Dissertation, do not count toward this twelve (12) credit hour approved elective requirement.

The above courses account for forty-two (42) of the total fifty-four (54) hours (students entering with a master's degree) or eighty-four (84) hours (students entering with a bachelor's degree) required for the Ph.D. Additional course listings can be obtained by writing to the Director.

## **Other Program Requirements:**

- (1) The student is required to pass an oral and/or written qualifying examination which is administered after successful completion of the four (4) core courses.
- (2) The Ph.D. program requires (a) proficiency in two of the following languages: French, German, Russian or Spanish, or (b) proficiency in one language and in statistics or computer science, or (c) proficiency in one language and a nine (9) hour minor, the hours for which do not apply toward the degree.
- (3) Selection and approval of a suitable research problem.
- (4) The student is required to pass an oral and/or written comprehensive examination to determine the student's comprehension of course material and the student's ability to pursue the proposed research.
- (5) Completion and successful defense of a scholarly dissertation based on the students original research.

## DEPARTMENT OF MATHEMATICS

Wallace Pye, Chair Hattiesburg, MS 39406-5045 (601) 266-4289

The Department of Mathematics offers a traditional program leading to the Master of Science degree with a major in Mathematics. In addition, the Department of Mathematics offers an interdisciplinary program leading to the Master of Science degree in Mathematics with an emphasis in Computational Science. This latter program is offered in cooperation with the Department of Computer Science and Statistics and the Department of Physics and Astronomy. The Department of Mathematics also participates, through the School of Mathematical Sciences, in granting the Doctor of Philosophy degree in Scientific Computing with an emphasis in Computational Mathematics. This multidisciplinary degree program is offered in cooperation with the Department of Computer Science and Statistics and the Department of Physics and Astronomy. For further information about this Ph.D. program as well as the multidisciplinary master's program, please see the School of Mathematical Sciences section of this **Bulletin**.

## **Admission Requirements:**

In addition to the general admission and academic requirements for all master's programs as set forth in this **Bulletin**, regular admission to the master's programs in mathematics requires that the applicant

- satisfy the present undergraduate requirements for a major in Mathematics at the University of Southern Mississippi;
- have a combined score of 1000 on the verbal and quantitative portions of the GRE General Test;
- 3) send three letters of recommendation and a current resume, if the student is applying for a teaching assistantship;
- 4) earn a score of at least 580 on the TOEFL Examination, if he or she is an international student.

## **Requirements Common to Both Master's Programs:**

Before completing one semester of graduate work, the student should select a three-person advisory committee from the mathematics graduate faculty. The student, with the help of his or her academic advisor, should prepare an "Application for Approval of Graduate Program" form. The advisor will distribute copies to the graduate faculty, the student's advisory committee, the department chair, the departmental file, and the applicant. Subsequent changes in the program must be approved by the department chair and all three committee members.

Each candidate for the master's degree will be expected to demonstrate mastery of subject matter on the Master's Comprehensive Examinations. These examinations consist of two parts: a written examination and an oral examination. The written examination's content is dependent on the program emphasis and thesis option. The oral examination may cover all course work, including courses taken as an undergraduate. These examinations must be successfully completed two weeks prior to graduation.

The student must enroll in the two-semester advanced calculus sequence at the graduate level at the beginning of the graduate program if the equivalent of this sequence was not included in the student's undergraduate preparation. Neither course can be used to satisfy any part of the minimum hour requirement for either master's degree, and a grade of B or above must be earned in each of the two courses.

All students must enroll in the mathematics seminar during the first two semesters of their programs. No more than six hours may be earned in the mathematics seminar. Those students in the computational science emphasis program who do not have assistantship awards need not meet the mathematics seminar requirement. With the department chair's approval, those students in the traditional program who cannot enroll in the mathematics seminar because of mitigating circumstances can instead meet the requirement that they include at least 21 hours of 600-level mathematics courses in their programs.

The student who desires to write a thesis must select a graduate faculty member who agrees to serve as thesis director. Prior to beginning the thesis, a student must submit (for approval to his or her advisory committee) a prospectus, the guidelines for which are available in the departmental office.

#### Traditional Master of Science in Mathematics

The following minimal requirements must be included in the program:

- 33 hours of graduate course work beyond the equivalent of a USM undergraduate degree in mathematics.
- 21 hours of courses numbered above 600.
- 18 hours of mathematics courses numbered above 600.

NOTE: Subject to approval of the department chair and the student's advisory committee, an outside minor consisting of 9 semester hours may be used as a portion of the 33-hour program.

Courses offered by the department are grouped into seven areas. The student should select a suitable balance in at least three of these seven areas. The written exam will cover the content of two courses (selected by the advisory committee in consultation with the student) from each of the student's three areas of specialization. The student whose thesis prospectus has been approved need select only two areas of specialization (other than the one in which the thesis is written). The written exam will cover the content of two courses from each of these two areas. The oral examination will then consist primarily of a defense of the thesis.

### Seven Specialty Areas

- 1. Topology/Geometry: 575, 601, 675, 683
- 2. Analysis: 536, 636, 637, 682
- 3. Algebra and Linear Algebra: 521, 523, 524, 526, 603, 610, 681
- 4. Optimization and Numerical Analysis: 518, 519, 560, 561, 610
- 5. Real Analysis and Probability: 520, 641, 642
- 6. Combinatorics and Graph Theory: 537, 539, 629
- 7. Applied Analysis: 515, 517, 520, 605, 606, 684

## Master of Science in Mathematics with an Emphasis in Computational Science

This multidisciplinary degree program requires that the student complete a 27 hour core (three courses from each of the three disciplines) and an additional 9 hours in mathematics. The student who has been awarded an assistantship must also include 6 hours of mathematics seminar in his\her program. These minimum requirements are as follows:

- (I) Core (27 hours) Please see the School of Mathematical Sciences section of this Bulletin.
- (II) MAT 689 I, II (Mathematics Seminar I, II; 6 hours is required of those students who receive an assistantship)
- (III) MAT 561 (Numerical Analysis II) plus six additional hours to be chosen from: MAT 629, 684, (remaining MAT core course), a 600-level MAT numerical differential equations course.

The master's comprehensive exam will cover the content from six courses: MAT 560, 561; two courses from MAT 605, 606, 6XX (a numerical differential equations course); and two courses from MAT 610, 629, 684.

## DEPARTMENT OF MEDICAL TECHNOLOGY

M. Jane Hudson, Chair Hattiesburg, MS 39406-5134 (601) 266-4908

## **Admission and Program Requirements**

The Master of Science in Medical Technology degree programs seek to provide the student with skills and knowledge for professional enhancement. Graduates of the programs may be candidates for positions as laboratory managers, education coordinators, hospital or college/university medical technology faculty members, researchers, departmental supervisors, etc. The program is structured to provide the student with an area of emphasis.

The Department of Medical Technology offers two programs leading to the Master's degree in Medical Technology. One program is for the individual who possesses certification as a medical technologist from a recognized national certifying agency. This certification is an entrance requirement.

The second program is for the individual who does not hold certification as a medical technologist from a recognized national certifying agency. This program includes a medical technology practicum that allows the individual to become eligible to take a national certification examination. Certification from a recognized national certifying agency is a mandatory exit requirement.

For both programs, in addition to meeting the general requirements of the Graduate School and University as stated in this **Bulletin**, the applicant must present a total score of 850 on the verbal and quantitative sections of the GRE. Regardless of previous college experience, if English is not the native language of any student, evidence of English proficiency must be provided prior to admission into the graduate program. The MTELP (Michigan Test of English Language Proficiency) requirement is "Proficiency II" and is preferred by the department. Alternatively a TOEFL of 550 may be accepted.

A minimum of thirty (30) semester hours of course work, excluding hours awarded for thesis, is required for the thesis option. A minimum of thirty-six (36) semester hours of course work is required for the non-thesis option. In addition, individuals who do not hold certification at admission must complete a 12 month practicum of fifty-one (51) hours. A minimum of eighteen (18) semester hours must be in courses numbered 600 or above. The courses should interrelate and be directed toward an area of emphasis. An area of emphasis such as microbiology, chemistry, hematology, immunology, management, or education will be chosen by the student, and all course work designated and approved by the student's graduate committee during the first semester of the program. Students selecting the thesis option are required to write a thesis under the direction of a Medical Technology department faculty member on a subject approved by the student's graduate committee. The student's graduate committee is composed of a chair and two members recommended by the department chair and appointed by the Graduate Dean. Upon completion of course work, all students must pass oral and written comprehensive examinations. Additionally, student selecting the thesis option must successfully present an oral defense of the master's thesis.

Non-major masters students must obtain permission of the instructor to register for MTC 500, 500L, 502, 502L, 504, 504L, 506, 506L. Registration for practicum level courses is limited as described in this **Bulletin**.

## DEPARTMENT OF PHYSICS AND ASTRONOMY

William E. Hughes, Chair Hattiesburg, MS 39406-5046 (601) 266-4934

The Department of Physics and Astronomy offers a program leading to the Master of Science degree with a major in Physics. The curriculum is designed to provide students with knowledge of both the fundamental areas of physics as well as selected applied physics topics. Research areas from which a thesis may be chosen include Digital Signal Processing, Acoustics, Viscous Fluid Flow, Turbulence/Chaos, Polymer Physics, Mathematics Physics, Statistical Mechanics, Many-Body Methods in Nuclear and Condensed Matter, and General Quantum Field Theory.

In addition to the Polymer Physics option, the department also offers a Computational Science - Physics option. This is a 36 semester hour interdisciplinary program offered in cooperation with the Department of Mathematics and the Department of Computer Science and Statistics.

## **Admission Requirements**

Admission to the Master of Science Program is based upon a student's previous academic performance and scores on the **Graduate Record Examination (GRE)** and the score on the **TOEFL** examination for international students. Prospective graduate students should have completed mathematics through differential equations, and satisfactorily completed courses in introductory physics, mechanics, electricity and magnetism, modern physics and quantum mechanics at the undergraduate level. Students with inadequate preparation may be admitted but will be required to complete make-up courses with a grade of B or better. A combined score on the **GRE** aptitude sections (Verbal plus Quantitative) of 1000 is required for admission to the program. Students scoring less than 1000 may be admitted on a conditional or non-degree status. It is recommended, but not required, that students applying for a stipend take the Advanced Physics GRE. For international students a minimum score of 540 on the **TOEFL** is required.

## **Course Work and Degree Requirements**

## Requirements for graduation include:

- 1. Completion of a minimum of thirty (30) hours of graduate work.
- 2. Completion of the Physics Core courses.
- 3. Development and completion of an original research project, thesis, and oral defense.
- 4. Satisfactory completion of a Comprehensive Examination.

## Required Physics Core:

Required I hysics Core.	
1. PHY 601, 602, 603, 650, 651	15 hours
2. PHY 689: Physics Seminar	4 hours
3. PHY 698: Thesis	

### **Polymer Physics Option:**

Students choosing this optional program to the M.S. in Physics must have successfully completed at least one full year of General Chemistry with Laboratory and it is strongly recommended that one semester of Organic Chemistry be taken for credit. Attendance at relevant seminars in the Department of Polymer Science is required.

difficults in the Department of Forymer Science is required.	
Physics Core for Polymer Option:	
PHY 601, 602, 603, 650, 689(I, II, III)	urs
Polymer Science: (at least 9 hours from the following)	
PSC 710, 711, 712, 730, 811, 8129+ho	urs
PHY 698: Thesis (in the area of Polymer Physics)	urs
	Physics Core for Polymer Option: PHY 601, 602, 603, 650, 689(I, II, III)

## **Computational Science - Physics Option:**

## Requirements for graduation include:

- 1. Completion of at least thirty-six (36) semester hours of graduate work.
- Completion of the Computational Science core courses listed under the School of Mathematical Sciences in this Graduate Bulletin.
- Satisfactory completion of a Comprehensive Examination covering the areas of Classical Mechanics, Electricity and Magnetism, and Quantum Mechanics.

Attendance at seminars in the Department of Physics is strongly recommended.

## DEPARTMENT OF POLYMER SCIENCE

Robert Y. Lochhead, Chair Hattiesburg, MS 39406-0076 (601) 266-4868

The Department of Polymer Science offers programs at the master's and doctoral levels. Curricula are designed to provide both a fundamental understanding of polymer chemistry and engineering and advanced courses dealing with special topics and state-of-the-art subjects. Both the M.S. and Ph.D. degrees require extensive research in areas involving basic investigations and developments applied to current and future problems of our society and world.

## MASTER'S DEGREE PROGRAM

## **Admission Requirements**

Admission to the master's program is based upon previous academic performance and scores on the aptitude section of the Graduate Record Examinations. A minimum grade point average of 2.75 or better on the last 60 hours of undergraduate work, two letters of recommendation and GRE scores on the Verbal (V) and Quantitative (Q) are required to satisfy the following formula:

## V + Q > 1050

## **Requirements for Graduation**

Graduation is based upon:

- Completion of 30 hours of graduate work including the 21 hours of PSC core courses with a GPA of 3.0 or better.
- 2. Satisfactory development of an original research project and a thesis.
- 3. Satisfactory completion of the final comprehensive examination.

### **Required Courses**

PSC 701, 702, 710, 711, 720, 721, 730, and 703 or 712	21
PSC 691, 698: Research in Polymer Science and Thesis	10-15
PSC 789: Polymer Science Seminar	2-4

## **DOCTOR OF PHILOSOPHY**

The Department offers the Ph.D. degree in Polymer Science. Minimum course requirements for the doctorate are seventy-eight (78) semester hours not including research tools and dissertation. Forty-eight (48) semester hours are required beyond a master's degree in Polymer Science or a related area. Doctoral students must take all core courses (PSC 701, 702, 703, 710, 711, 712, 720, 721, 730, 740) as well as two 800-level courses that are offered. Graduate students must register for one hour of polymer science seminar (PSC 789) each semester that they are in residence.

#### **Admissions Requirements**

The Department usually admits students only to the master's program because of the diversity of entering students' backgrounds. Demonstrated excellence is required in coursework and examinations before a student is allowed to enter the doctoral program. Admission of students with previous graduate coursework or master's degrees from other institutions will be considered on an individual basis.

#### **Qualifying Examination**

This examination is taken during the first week prior to the student's first semester of graduate work. It requires a minimum proficiency in organic and physical chemistry.

### **Comprehensive Examination**

The written comprehensive examination is given once a year at the beginning of the summer quarter. This three-part examination covers the areas of organic, physical, and practical polymer science. A student who fails any part of the examination must retake and pass that part the following year. Only one additional attempt is allowed.

### **Dissertation Prospectus**

Within 9 months of completing the written comprehensive examination, a written dissertation prospectus which includes an annotated bibliography must be approved by the student's committee. The prospectus summarizes the student's work accomplished to date and gives an outline of research objectives for the dissertation project.

## **Proposition Presentation and Oral Defense**

Within 18 months of completing the comprehensive examination, the student must submit an independently conceived and developed written proposal dealing with an original proposition unrelated to his or her dissertation research. This proposal is then presented orally and defended before the faculty. Oral evaluation of the student's general knowledge of polymer science is carried out concomitant with his or her defense of the proposal.

## **Admission Requirements for Advanced Study**

Regular admission requires (1) obtaining a minimum GPA of 3.0 on the 26 hours of core courses; (2) obtaining a minimum GPA of 3.5 in at least 30 hours of graduates courses taken at USM including the core courses and research; and (3) passing all three sections of the written comprehensive examination. In addition, a student's transcript must show no more than 2 "C" and no grade lower than a "C" in the core courses. There is no option for conditional admission for advanced study.

Additional requirements for the Ph.D. degree dealing with residency, the research tools, the committee, the dissertation, the dissertation defense, application for candidacy and graduation are described elsewhere in this **Bulletin**.

## CENTER FOR SCIENCE EDUCATION

Iva D. Brown, Director Hattiesburg, MS 39406-5087 (601) 266-4739

The Center For Science Education, recognizing the national goal of improving the delivery of science instruction and the additional opportunities for individuals with advanced training in science education, provides a program for the Master of Science, Doctor of Philosophy, and Doctor of Education degrees in Science Education.

Any student who has successfully completed a Bachelor of Science or Bachelor of Arts degree in any area of science or combination of sciences, or has an equivalent academic preparation in the sciences, who demonstrates a minimum score on the aptitude section of the GRE of 850, or a total score of at least 1125 on the common and area examinations of the National Teacher Examinations (NTE), or a total score of at least 1965 for the three tests (Communication Skills, General Knowledge, and Professional Knowledge) of the Core Battery of the NTE, or a score of at least 39 on the Miller Analogies Test for a master's and 1000 on the GRE for the doctoral degrees, who has a grade point average of at least 3.0 for a master's and 3.5 for doctoral programs, and who meets the requirements set forth by the Graduate School of the University of Southern Mississippi, is eligible to pursue a program in Science Education. A student who does not meet all the above requirements may be admitted conditionally.

In addition to the general requirements and procedures pertaining to graduate degrees as outlined previously in this **Bulletin**, the following requirements must be fulfilled.

### **MASTER'S PROGRAM**

- 1. Hold A certification.
  - (a) If the student does not hold certification he or she will be expected to enroll in courses necessary to complete this deficiency.
  - (b) These courses will not satisfy requirements for the master's degree.
- 2. Completion of a minimum of thirty-four (34) semester hours of graduate work.
  - (a) A minimum of twelve (12) semester hours in a specific science—biology, chemistry, earth and environmental sciences, or physics.
  - (b) Nine (9) semester hours in a related science.
  - (c) Six (6) semester hours in professional education area (REF 601 and REF 607). Please see requirements for AA certification.
  - (d) Seven (7) semester hours (including seminar from the Department of Science Education and a maximum of three (3) semester hours of special problems).

A thesis carrying six semester hours is optional and would substitute for two courses in Science Education. The total program with thesis requires thirty-four (34) semester hours graduate credit. The thesis may involve research in a particular science or research in science education.

## DOCTORAL PROGRAM

### **Teaching Program**

- Possess a master's degree and hold an AA certification in one of the sciences or the equivalency thereof.
- 2. Complete successfully an additional fifty-seven (57) semester hours of graduate work beyond the master's degree excluding the dissertation which will include:
  - (a) Fifteen (15) semester hours in a specific science (minimum of)
  - (b) Nine (9) semester hours in a related science (minimum of)
  - (c) Three (3) semester hours in professional education (minimum of)
  - (d) Twenty-four (24) semester hours in science education (including 3 hours of seminar and limiting hours of special problems to 6 semester hours
  - (e) Six (6) semester hours of electives science education, specific science, or professional education
- 3. Complete an acceptable dissertation.

Additional requirements include demonstrated proficiency in educational statistics and independent research. Research, culminating in a dissertation, may deal with a problem in the student's science specialty or a problem in science education. However, the research problem must address educational needs related to the teaching of science.

During a student's first or second semester of enrollment, the department will require a written and/or oral qualifying examination. This examination is designed to assess both the student's fitness to pursue doctoral work and to assist the committee members in planning his or her doctoral program. A written and/or oral comprehensive examination must be taken at or near the completion of the candidate's course work. Upon acceptance of the dissertation by the candidate's committee and at least four weeks prior to graduation, a final oral examination in defense of the candidate's dissertation will be administered. The Center For Science Education furthermore requires that the candidate's research be acceptable for publication in refereed journals.

In addition to an evaluation of the student's record, tests and examinations are used for diagnostic purposes in planning programs. Students are expected to possess proficiency at the undergraduate level in the science area chosen for concentration. Students not proficient may be required to take additional courses. The **Graduate Record Examinations** verbal and quantitative score should be submitted with the application for advanced graduate study.

# Non-Teaching Program Emphasis in Mathematics and Computer Science

#### Mathematics

- 1. Hold a master's degree with emphasis in mathematics or the equivalency thereof.
- Complete successfully an additional fifty-seven (57) semester hours of graduate course work beyond the master's.
  - a)Twenty-four (24) semester hours in mathematics.
  - b)Twenty-four (24) semester hours in science education.
  - c)Nine (9) semester hours of electives from science education, mathematics, related area, or professional education.

#### **Computer Science**

- 1. Hold a master's degree with emphasis in computer science or the equivalency thereof.
- Complete successfully an additional fifty-seven (57) semester hours of graduate course work beyond the master's.
  - a) Eighteen (18) semester hours in computer science.
  - b) Nine (9) semester hours in a related science education emphasis.
  - c) Twenty-four (24) semester hours in science education.
  - d) Six (6) semester hours of electives from science education, mathematics, related area or professional education.

The non-teaching program in mathematics and computer science requires the completion of an acceptable dissertation in the emphasis area. Additional requirements include demonstrated proficiency in educational statistics and independent research. Research, culminating in a dissertation, must deal with a problem in the content emphasis and may or may not relate to education.

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During a student's first or second semester of enrollment, the department will require a written and/or oral qualifying examination. This examination is designed to assess both the student's fitness to pursue doctoral work and to assist the committee members in planning his or her doctoral program. A written and/or oral comprehensive examination must be taken at or near the completion of the candidate's course work. Upon acceptance of the dissertation by the candidate's committee and at least four weeks prior to graduation, a final oral examination in defense of the candidate's dissertation will be administered. The Department of Science Education furthermore requires that the candidate's research be acceptable for publication in refereed journals.

In addition to an evaluation of the student's record, tests and examinations are used for diagnostic purposes in planning programs. Students are expected to possess proficiency at the master's level in mathematics or computer science. Students not proficient may be required to take additional courses. The **Graduate Record Examinations** verbal and quantitative score should be

submitted with the application for advanced graduate study.

# THE UNIVERSITY OF SOUTHERN MISSISSIPPI GULF COAST

James O. Williams, Dean 730 East Beach Boulevard Long Beach, MS 39560-2699 (601) 865-4500

The University of Southern Mississippi Gulf Coast serves students at three locations: the Gulf Park Campus in Long Beach, the Keesler Center on Keesler Air Force Base, and USM Jackson County Center located on the Jackson County Campus of the Mississippi Gulf Coast Community College in Gautier. Refer to the USM Gulf Coast Regional Campus Bulletin for specific information concerning the Gulf Coast courses and programs.

#### GRADUATE DEGREE PROGRAMS

USM Gulf Coast provides a flexible delivery system designed to react to the educational needs of Coast citizens. Consequently, new courses are added to the schedule as student demand warrants and resources permit. A sufficient number of courses are now being offered so that USM Gulf Coast students may earn the following graduate degrees:

### Master's Degrees

Adult Education
Business Administration
Professional Accountancy
Professional Master of Business
Administration
Computer Science
Criminal Justice
Educational Administration
and Supervision
Elementary Education
Engineering Technology
English (In cooperation with
the Hattiesburg Campus)
History (In cooperation with
the Hattiesburg Campus)

Nursing
Political Science—
Public Administration
Public Relations
Reading
Secondary Education
Special Education
Technical and
Occupational Education

#### Specialist's Degrees

Adult Education Elementary Education Special Education Educational Administration Secondary Education

#### Admission

USM Gulf Coast graduate admission requirements and procedures are identical to those outlined elsewhere in this Bulletin. All students, with the exception of P.-M.B.A. majors, initiate procedures through the USM Gulf Coast Director of Student Services. Applicants to the P.-M.B.A. program may contact the Division of Business Administration at the Gulf Park campus for information and application forms. In order to facilitate proper advisement and predetermination of admission status, students should furnish transcripts and complete applications for admission prior to registration. Transcripts and completed applications should be sent to the Director of Student Services, USM Gulf Coast, 730 East Beach Blvd., Long Beach, MS 39560.

### **Graduate Residency Requirements**

Specialist and doctoral level students are reminded that graduate residency requires intensive full-time study of an individualized nature. In addition, some departments have options to meet specialized needs. These students must have their degree plans approved in writing in advance by their department chair prior to course enrollment.

#### **Course Load**

USM Gulf Coast course load requirements are identical to those for the Hattiesburg campus described elsewhere in this Bulletin.

#### **Fees**

#### ALL FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE

Undergraduate Fees \$83.00 per semester hour Graduate Fees \$111.00 per semester hour

One-half of a student's fees are due and payable at the time of registration. Students with completed loans, grants, or scholarships may use those funds as payment for the first half of total fees. Fees deferred past the last day to register each semester will be billed monthly. A monthly service charge of 1.5% will be applied to the unpaid balance. Master Card and Visa credit cards will be accepted.

A general tuition level cap of \$1003.00 has been set for undergraduate students enrolled for 12-19 semester hours and for graduate students enrolled for 9-13 semester hours. Undergraduate students enrolled for more than 19 hours will be assessed \$83.00 for each additional hour and graduate students enrolled for more than 13 hours will be assessed \$111.00 for each additional hour.

Students who are not residents of Mississippi will be assessed an additional fee of \$102.00 per semester hour for undergraduate coursework, and \$136.00 per semester hour for graduate coursework, up to a maximum of \$1,230.00.

# FULL-TIME STUDENT TUITION Including \$5.00 Registration Fee

Undergraduate	Graduate
\$1003.00	\$1003.00
12-19 hrs.	9-13 hrs.

#### SPECIAL FEES

Registration Fee	\$ 5.00
Late Registration Fee	\$50.00
Vehicle Registration (GP & JC)	\$ 2.00
(The special fees listed above are no	on-refundable

A few courses are much more costly to teach than the majority of courses offered. Therefore, the following special fees are required to meet these additional costs:

ACC	300, 320	\$15.00 per course
BA	301	15.00 per course
BSC	380L, 411L, 412L, 415L, 416L, 426L, 428L, 432L, 433L, 465L	15.00 per course
BSC	511L, 512L, 515L, 516L, 526L, 528L, 532L, 533L, 565L	15.00 per course
CET	301L, 302L, 316L, 370L, 420L, 471L, 472L, 477L, 478L	
CET	501L, 520L, 571L, 572L, 577L, 578L, 672	
CSS	320, 330, 340, 341, 342, 350, 400, 422, 430, 441, 442	
CSS	460, 461, 462, 480, 481, 500, 502, 541, 542, 620, 635, 637	
EET	312L, 315L, 342L, 412L, 512L	15.00 per course
ENT	390, 430L, 470L, 530L, 570L	15.00 per course
FIN	300	
FSC	340L, 341L, 442L, 491L	
IET	302, 480	
LIS	405, 505	
LIS	416, 516	
	418, 419, 460, 461, 487, 518, 519	
	420	
	300	
	307	
	327, 412, 413, 427, 428	
NSG	322, 323, 469L	20.00 per course
	361, 362, 363	
	419, 519	
	430L	
REF	416, 516	
SCE	432, 461, 532, 561	15.00 per course

# CALENDAR

The USM-Gulf Coast academic calendar and holidays follow the same schedule as the Hattiesburg Campus calendar found elsewhere in this Bulletin.

SEMESTER	CLASSES BEGIN	FINAL EXAMS
FALL 1994-1995	August 22-26, 1994	December 12-16, 1994
SPRING 1994-1995	January 9-16, 1995	May 8-12, 1995
SUMMER 1994-1995	May 29-June 2, 1995	July 31-August 4, 1995

## **GULF COAST RESEARCH LABORATORY**

Thomas D. McIlwain, Director 703 East Beach Dr. Ocean Springs, MS 39566-7000 (601) 872-4201

The Gulf Coast Research Laboratory is a non-degree granting Mississippi institution of higher learning which is under the administrative control of The University of Southern Mississippi. In addition to the main campus in Ocean Springs, the Laboratory operates the J.L. Scott Marine Education Center and Aquarium in Biloxi, MS.

The Laboratory focuses on marine related research in the coastal waters. Research emphasis areas include aquaculture, fisheries sciences, environmental fate and effects, biodiversity and systematics, coastal ecology, and oceanography.

#### SUMMER ACADEMIC PROGRAM

Courses taught at GCRL are approved through the Marine Science Department and where applicable, are cross-listed under the Biological Sciences, Geology and Science Education Departments. Most courses are available for upper-level undergraduate or graduate credit.

#### Admission

Students must apply directly to GCRL for admission. Contact Office of Student Services, Gulf Coast Research Laboratory, P.O. Box 7000, Ocean Springs, MS 39564 for an application form.

#### **Course Load**

Courses are offered in two five-week summer terms. Students enroll in only one course each term but may earn up to twelve (12) semester hours credit during the summer. Classes usually meet each day during the week with particular times scheduled for field trips, classroom instruction and laboratory work.

#### Housing

Housing is available on campus in an air-conditioned dormitory. The dining hall serves three meals daily to all dormitory occupants.

#### **FEES**

Application fee: \$ 5.00

Undergraduate: \$83.00 per semester hour Graduate: \$111.00 per semester hour

Room and board: \$80.00 per week

Students pay fees directly to GCRL. Fees are subject to change without prior notice.

#### CALENDAR

Application Deadline: May 1, 1994
First summer term starts: May 29, 1994
Second summer term starts: July 3, 1994

# **COURSE DESCRIPTIONS**

### INDEX OF ABBREVIATIONS FOR FIELDS OF INSTRUCTION

ACC	Accounting	HPR	Human Performance and
ACT	Architectural Engineering		Recreation
	Technology	HRT	Hotel, Restaurant and
ADE	Adult Education		Tourism Management
AMS	American Studies	IB	International Business
ARE	Art Education	IET	Industrial Engineering
ART	Art		Technology
BCT	Construction Engineering	JOU	Journalism
	Technology	LAT	Latin
BTE	Business Technology	LIS	Library and Information Science
	Education	MAR	Marine Science
BSC	Biological Sciences	MAT	Marine Science
CD	Child Development	MBA	Master of Business
CED	Cooperative Education		Administration
CET	Computer Engineering	MC	Mass Communication
	Technology	MED	Music Education
CHE	Chemistry and Biochemistry	MET	Mechanical Engineering
CHS	Community Health Sciences	11121	Technology
CI	Curriculum and	MFG	Manufacturing Technology
CI	Instruction:	MGT	Management
	CIE Elementary	MIS	Management Information
	CIS Secondary	WIIS	Systems
CJ	Criminal Justice	MKT	Marketing
CSC	Computer Science	MTC	Medical Technology
CSS	Computer Science and	MUP	Music Performance Studies
CSS	1		
DAN	Statistics	MUS	Music
DAN	Dance	NSG	Nursing
ECO	Economics	PHI	Philosophy
ED	Economic Development	PHY	Physics
EDA	Educational Administration	PLG	Planning
EET	Electronics Engineering	PS	Political Science
	Technology	PSC	Polymer Science
ENG	English	PSY	Psychology
ENT	Engineering Technology	REF	Research and Foundations
ESC	Environmental Science	REI	Real Estate and Insurance
FAM	Family Relations	REL	Religion
FIN	Finance	RTF	Radio-Television-Film
FL	Foreign Languages	SC	Scientific Computing
FMA	Fashion Merchandising and	SCE	Science Education
	Apparel Studies	SCM	Speech Communication
FN	Food and Nutrition	SHS	Speech and Hearing Sciences
FRE	French	SOC	Sociology
FSC	Forensic Science	SPA	Spanish
FSM	Food Service Management	SPE	Special Education
GER	German	SWK	Social Work
GHY	Geography and Area	THE	Theatre
	Development	THY	Therapy
GLY	Geology	TOE	Technical and Occupational
GS	General Studies		Education
HEE	Home Economics Education	TOX	Toxicology
HIS	History	TSL	Teaching Speakers of Other
			Languages

The plus (+) sign in front of a course indicates that a special fee is charged for that course. (See SPECIAL FEES AND EXPENSES.)

### **ACCOUNTING (ACC-605)**

- 502. Advanced Accounting II. 3 hrs. Prerequisite: ACC 401 with a grade of C or better. An introduction to consolidated financial statements, accounting for fiduciaries.
- 511. Financial Accounting. 3 hrs. Prerequisite: Computer literacy. Fundamentals of accumulating, reporting, and interpreting financial accounting information for internal and external uses. See also MBA 511.
- 512. Seminar on Contemporary Accounting Topics. 1.5 hrs. Selected readings and discussions of current accounting topics.
- 560. Managerial Accounting. 3 hrs. Prerequisite: ACC 511 or the equivalent. An analysis of the use of accounting information in managerial decision making. See also MBA 560.
- 598. International Accounting Seminar Abroad. 3 hrs. Prerequisite: Permission of Program Director. Conducted in London, England: a series of lectures and discussions involving authorities on international accounting issues and practices.
- 605. Current Accounting Theory & Research. 3 hrs. Prerequisites: 15 hours of accounting above accounting principles. A study of financial accounting literature and the use of data bases to solve contemporary accounting problems.
- 610. **Advanced Auditing.** 3 hrs. Prerequisites: 15 hours of accounting above accounting principles including ACC 409. A study of the professional practice of auditing and the role of theory, methodology, and technology.
- 620. Advanced Cost/Managerial Accounting. 3 hrs. A study of the theory associated with, and systems and procedures designed to develop and integrate accounting data for management.
- 630. Tax Seminar I. 3 hrs. Prerequisite: ACC 330 or equivalent. Tax planning with emphasis on corporations, partnerships, tax option corporations, and tax administration and practice.
- 631. Tax Seminar II. 3 hrs. Prerequisite: ACC 330. Tax planning and research with emphasis on exempt entities, trusts and estates, transfer taxes, and the ethical responsibility of tax practice.
- 660. Controllership. 3 hrs. The interrelationship of the controller and modern information systems.
- 692. Special Problems in Accounting. 1-6 hrs. Individual study of specfic topics in accounting.
- 699. International Accounting Research Abroad. 3 hrs. Prerequisite: Consent of Program Director. A research course in international accounting offered for students enrolled in ACC 598.

## **ADULT EDUCATION (ADE-110)**

- 540. Methods and Materials in Adult Education. 3 hrs. A course in method and format of instructional materials for adults with emphasis on self-instructional techniques.
- 541. **Foundations of Reading Instruction for the Adult.** 3 hrs. This course involves an examination of the basis of reading instruction for the nonliterate adult.
- 542. **Methods and Materials for Teaching Adults to Read.** 3 hrs. Instructional and diagnostic materials and methods for dealing with functionally illiterate adults.
- 545. Teaching the Disadvantaged Adult. 3 hrs. A study of the educational problems of culturally deprived and handicapped adults in terms of programs and procedures found to be successful.
- 576. **Learning in Adult Education.** 3 hrs. A study of learning in adulthood related to a range of educational programs.
- 578. Specialized Studies in Developmental Disabilities. 1-6 hrs. Specialized study and skill acquisition in the area of developmental disabilities. Topics vary.
- 580. Applied Educational Gerontology. 3 hrs. This course prepares individuals to design and implement educational programs for older adults.
- 590. Special Problems in Adult Education. 1-3 hrs. Special areas of interest arranged for an individual or a group with common interests.
- 597. **Professional Collaboration for Developmental Disability Services.** 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.
- 601. **Principles of Adult Education.** 3 hrs. A survey of the history, philosophies, form, structure, and current developments in the field of adult education.
- 602. Organization and Administration of Adult Education. 3 hrs. A survey of organizational and management theory as applied to adult education agencies. The case study approach is used.

- 603. Human Resource Development as a Special Form of Adult Education. 3 hrs. The course compares and contrasts human resource development in organizations to other more traditional forms of adult education.
- 607. Program Planning and Curriculum Development in Adult Education. 3 hrs. The design of programs and courses of study related to a wide variety of adult education agencies.
- 650. **Issues in Adult Education.** 3 hrs. Examination of contemporary issues related to the education and learning of adults in a seminar format.
- 688. **Medical Aspects of Developmental Disabilities.** 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.
- 692. **Special Problems I, II, III.** 1-3 hrs. A study to develop knowledge and facility in a field of special interest to the student. Requires preparation of a scholarly paper under supervision of a graduate professor.
- 701. Delivery Systems for Adult Education. 3 hrs. Prerequisites: ADE 601 and ADE 607. Introduction and orientation to a variety of organizations and agencies responsible for conducting adult education programs.
- 737. Practicum in Adult Education. 3 hrs. A direct work experience in an adult education setting unrelated to student's employment.741. Assessment in Adult Education. 3 hrs. Prerequisite: ADE 576, REF 601, or permission of instructor. Explore, develop, and evaluate various assessment methods and strategies used in adult education.
- 750. **Education and the Older Adult.** 3 hrs. A study of the elderly adult and the implications of those characteristics for adult education programs.
- 760. Readings in Adult Education. 3 hrs. Students select readings in the adult education literature for discussion in a seminar format.
- 791. **Research in Adult Education.** 1-16 hrs. Prerequisite: Approval of the major professor.
- 792. Special Problems. 3 hrs.
- 794. Field Problems in Adult Education I, II, III. 1-3 hrs. arr. A project dealing with a specific problem in an adult education agency. Registration must be approved by student's major professor and departmental chairman.
- 797. **Independent Study and Research.** 3 hrs. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 798. **Specialist Thesis.** 6 hrs. A field study or thesis type research study representing the major research component of the specialist's degree.
- 889. Seminar in Adult Education. 3 hrs. Seminar required for adult education doctoral students in residence. The focus is on the dissertation research process.
- 898. Dissertation, 12 hrs.

# **AMERICAN STUDIES (AMS-204)**

- 504. Issues in America. 3 hrs. Topics vary according to professor and department.
- 599. British Studies: Anglo-American Studies. 3-6 hrs. A seminar conducted in Great Britain under the auspices of the USM Institute of Anglo-American Studies.

# **ANTHROPOLOGY (ANT-286)**

- SOC 560. Quantitative Methods. 3 hrs. May also be offered for credit as an anthropology course.
- SOC 562. Methods of Social Research. 3 hrs. May also be offered for credit as an anthropology course.
- 511. Foundations of Indo-European Thought and Culture. 3 hrs. A comparative approach to the background of western culture, utilizing linguistics, mythology, and archaeology.
- 516. Ethnographic Field Methods. 1-6 hrs. Methods of ethnographic fieldwork through participation in organized field studies. Permission of instructor required.
- 520. Culture and Ethnicity. 3 hrs. An analysis of culture and ethnicity with special reference to the problem of modernization.

- 521. Anthropological Theory. 3 hrs. A general survey of historical anthropological thought and of the major contemporary schools of anthropological theory.
- 522. Ecological Anthropology. 3 hrs. An examination of human cultural strategies for adaptation to different environments.
- 523. Economic Anthropology. 3 hrs. The evolution of economic systems, cross-cultural analysis of economic systems, and the role of economic forces in cultural change.
- 524. Primitive Religion. 3 hrs. Beliefs and rituals in tribal society, shamanism and trance states; animism and magic; altered states of consciousness in religious ideology evidences of prehistoric religion, and revitalization movements.
- 525. **Kinship and Social Organization.** 3 hrs. A comparative study of kinship and social organization, and a survey of the major anthropological theories concerning organizational variability.
- 527. **Psychological Anthropology.** 3 hrs. Cross-cultural analysis of personality formation, perception and cognition, mental illness, and altered states of consciousness.
- 528. Political Anthropology. 3 hrs. A comparative survey of patterns of group decision-making, leadership, resolution of conflict and social control in human societies.
- 529. **Topics in Cultural Anthropology.** 3 hrs. Variable content. May be repeated three times in separate topical offerings.
- 531. **Prehistoric Archaeology.** 3 hrs. Corequisite: ANT 531L. Overview of analytical techniques and prehistoric technologies.
- 531-L. Prehistoric Archaeology Laboratory. 1 hr. Laboratory to accompany Prehistoric Archaeology (ANT 531).
- 533. **Prehistory of Southeastern Indians.** 3 hrs. A survey of the prehistoric archaeology of the Southeastern United States, especially Mississippi and adjoining states, from first inhabitants to the time of European contact.
- 536. Archaeology Field Methods. 3 hrs. Methods of fieldwork through participation in organized field projects.
- 539. Topics in Archaeology. 3 hrs. Variable content. May be repeated three times in separate topical offerings.
- 541. **Human Variation.** 3 hrs. An examination of human biological variation, including its sources, its classification, and its expression in different environments.
- 542. **Medical Anthropology.** 3 hrs. Introduction to the relationship between human culture and disease especially cross-cultural comparisons of perception and treatment of illness.
- 549. **Topics in Physical Anthropology.** 3 hrs. Variable content. May be repeated three times in separate topical offerings.
- 559. **Topics in Linguistic Anthropology.** 3 hrs. Variable contents. May be repeated three times in separate topical offerings.
- 599. British Studies. 3-6 hrs. Variable content. Lecture series and research offered abroad under the auspices of the Institute of Anglo-American Studies.
- 601. Teaching Anthropology. 1-3 hrs. An in-depth examination of the resources and techniques of introducing undergraduates to the discipline of anthropology. May be repeated three times.
- 607. **Applied Anthropology.** 3 hrs. The application of anthropology to the solution of contemporary social and cultural problems.
- 621. **Seminar in Ethnology.** 3 hrs. A comprehensive examination of method and theory in contemporary sociocultural anthropology, focusing particularly on the problems of ethnographic production and comparative analysis.
- 631. Seminar in Archaeology. 3 hrs. An in-depth examination of the method and theory of anthropological archaeology.
- 641. Seminar in Physical Anthropology. 3 hrs. A comprehensive examination of the method and theory of physical anthropology.
- 651. Seminar in Anthropological Linguistics. 3 hrs. An in-depth examination of the method and theory of anthropological linguistics.
- 692. Special Problems. 1-3 hrs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

- 698. Thesis, 1-6 hrs, for a total of 6 hrs.
- 792. Special Study Projects in Anthropology. 1-6 hrs. Special projects in reading, survey, or research in anthropology.

## **ARCHITECTURAL ENGINEERING TECHNOLOGY (ACT-392)**

- 526. Specifications. 3 hrs. Prerequisite: Permission of instructor. An introduction to development and writing of architectural project specifications.
- 592. Special Problems. 1-3 hrs. Prerequisite: Senior standing and approval of faculty adviser.

### ART (ART-660)

- 500. The Art of Italy. 3 hrs. An examination of art in Italy. A travel/study course.
- 513. Crafts II. 3 hrs. The creation and design of jewelry.
- 514. Crafts III. 3 hrs. The creation of surface designs for fabrics.
- 531. Ancient Art History. 3 hrs. 4000 B.C. to circa 600 A.D.
- 532. Medieval Art History. 3 hrs. 600 A.D. to circa 1300 A.D.
- 533. Renaissance Art History. 3 hrs. 1400 A.D. to 1600 A.D.
- 534. Baroque and Rococo Art History. 3 hrs. 17th and 18th centuries.
- 535. Nineteenth Century Art History. 3 hrs.
- 536. Twentieth Century Art History. 3 hrs.
- 598. British Studies, Art History. 3 or 6 hrs. Variable content. Lecture series and research offered abroad under the auspices of the Institute of Anglo-American Studies.
- 599. **British Studies, Art Studio.** 3 or 6 hrs. Variable content. Studio series offered abroad under the auspices of the Institute of Anglo-American Studies.
- 600. **Studio Foundations.** 3 hrs. A review, through studio problems, of some fundamental problems of plastic expression. Hours earned may not be used to fulfill degree requirements.
- 601. **Drawing Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor and department chair required for admission.
- 602. **Drawing Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor and department chair required for admission.
- 603. **Drawing Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor and department chair required for admission.
- 610. Crafts: Jewelry Design for Teachers. 3 hrs. The study of visual forms as pertaining to the jewelry crafts.
- 615. **Trends in Current Plastic Expression.** 3 hrs. A course designed to keep the student abreast of current trends in the plastic arts.
- 620. Adapting Selected Current Art Trends to School Practice. 3 hrs. Current art trends are identified and selections of them are developed in terms of philosophies, practitioners, background, and techniques.
- 621. **Painting Studio.** 3 hrs. Form problems in painting. Professional level of performance with intense criticism. Permission of instructor and department chair required for admission.
- 622. **Painting Studio.** 3 hrs. Form problems in painting. Professional level of performance with intense criticism. Permission of instructor and department chair required for admission.
- 623. **Painting Studio.** 3 hrs. Form problems in painting. Professional level of performance with intense criticism. Permission of instructor and department chair required for admission.
- 651. Ceramics Studio, 3-9 hrs. Form problems in ceramics. Three hour course, may be repeated twice. Permission of instructor and department chair required for admission.
- 652. **Sculpture Studio.** 3 hrs. Form problems in sculpture. Three hour course, may be repeated twice. Permission of instructor and department chair required for admission.
- 701. **Drawing Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor and department chair required for admission.
- 702. **Drawing Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor and department chair required for admission.

- 703. Drawing Studio. 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor and department chair required for admission.
- 721. **Painting Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor and department chair required for admission.
- 722. **Painting Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor and department chair required for admission.
- 723. **Painting Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor and department chair required for admission.
- 739. Directed Study in Art History/Criticism. 1-6 hrs. for a total of six hours.
- 760. Seminar. 1 hr.
- 761. Seminar. 1 hr.
- 762. Seminar. 1 hr.
- 799. **Creative Project.** 6 hrs. An individually motivated, sustained project of original art works demonstrating professional competence and stature, culminating in an exhibition. Oral and written proposal and defense required.

## **ART EDUCATION (ARE-665)**

- 600. Art Education Theory. 2 hrs. A comprehensive survey of Art Education trends and philosophies.
- 601. **Research in Art Education.** 3 hrs. A lecture/study seminar of current research and research techniques in the area; includes the compilation of bibliographic material and the organization of research projects in art education.
- 602. Art Techniques and Materials for Teachers. 3 hrs. A comprehensive survey of teaching techniques emphasizing the pedagogical potential and limitation of plastic media.
- 603. Teaching the Visual Relationships, 3 hrs. A lecture/study seminar course dealing with the teaching of the visual characteristics and relationships, and integrating them with the current practice and procedures in art education.
- 604. Teaching the Exceptional Student Contemporary Processes. 3 hrs. A course devoted to the pedagogical potential of contemporary processes for use with exceptional students.
- 605. Techniques of Dissemination of Student Art Work. 3 hrs. Techniques of advanced pedagogy in the selection, display, and showing of student work.
- 606. **History and Philosophy of Art Education.** 3 hrs. An integrative, historical, and philosophical study of Art Education. A lecture/study seminar course.
- 616. Advanced Art Seminar for Teachers in Elementary Education. 3 hrs. An advanced study of the scope and sequence of art education curricula. The coordination of art programs with sequential studies will be stressed.
- 625. Supervision of Art Education Programs. 3 hrs. A lecture/study seminar course on the problems and solutions involved in the supervision of public school art programs in grades K through twelve.
- 626. Curriculum and Instruction in Art Education. 3 hrs. A lecture/study seminar course on developing art curricula and teaching strategies, K-12, including demonstrations of instructional methods, analysis of programs, classroom management skills and student evaluation procedures.
- 691. Research Project in Art Education. 1-16 hrs. Prerequisite: Approval of the major professor.
- 692. Special Problems in Art Education I, II, III. 1-3 hrs. each.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

  Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hours. A written thesis.

### **BIOLOGICAL SCIENCES (BSC-300)**

- 500. History of Biology. 3 hrs. Lectures and papers concerning the development of biological sciences.
- 501. Natural History of Animals. 1 hr. Prerequisite: Consent of instructor. Life histories of animals. Designed for teachers.
- +501-L. Natural History of Animals Laboratory. 2 hrs.
- 502. Natural History of Plants. 1 hr. Prerequisite: Consent of instructor. Life histories of plants.
- +502-L. Natural History of Plants Laboratory. 2 hrs.
- 503. Natural History of Infectious Diseases. 3 hrs. A study of infectious diseases and their effect on man.
- 504. Field Biology. 1-2 hrs. arr. Ecological and taxonomic studies. Offered between semesters as 4- and 12-day field trips.
- +504-L. Field Biology Laboratory. 2-4 hrs. To be taken concurrently with BSC 504.
- 506. Zoogeography. 3 hrs. Prerequisite: Consent of instructor. A descriptive and analytical study of the distribution of animals.
- 508. **Invertebrate Zoology I.** 2 hrs. Functional morphology, systematics, and life histories of the phyla Porifera through the minor protostomes.
- +508-L. Invertebrate Zoology I Laboratory. 1 hr.
- 509. **Invertebrate Zoology II.** 2 hrs. Prerequisite: BSC 508 or consent of instructor. Functional morphology, systematics, and life histories of invertebrate phyla through the Hemichordata.
- +509-L. Invertebrate Zoology II Laboratory. 1 hr.
- 510. Human Parasitology. 3 hrs. Life histories, medical significance, and diagnosis of helminths and protozoa parasitic in man.
- +510-L. Human Parasitology Laboratory. 1 hr.
- 511. Entomology. 2 hrs. Structural adaptations, classification, life histories and habits, and the economic importance of insects.
- +511-L. Entomology Laboratory. 1 hr.
- 512. Medical Entomology. 2 hrs. Prerequisite: Consent of instructor. Anthropod vectors and agents of disease.
- +512-L. Medical Entomology Laboratory. 1 hr.
- 513. Arachnida Biology. 2 hrs. Biology, morphology, and classification of the arachnids.
- +513-L. Arachnida Biology Laboratory. 1 hr.
- 514. Ichthyology. 2 hrs. Evolutionary relationships, morphology, physiology and zoogeography of fishes, with emphasis on identification of local forms.
- +514-L. Ichthyology Laboratory. 1 hr.
- 515. Biology of Fishes. 2 hrs. Prerequisite: Consent of instructor. Function morphology, ecology and behavior of fishes.
- +515-L. Biology of Fishes Laboratory. 1 hr.
- 516. Introduction to Fishery Science. 2 hrs. A survey of the biology, management, and potential yield of fish populations.
- +516-L. Introduction to Fishery Science Laboratory. 1 hr.
- 517. Herpetology. 2 hrs. Collection, preservation, identification, and distribution of amphibians and reptiles. Field trips when possible.
- +517-L. Herpetology Laboratory. 1 hr.
- 518. Ornithology. 2 hrs. Prerequisite: BSC 361 recommended. Morphology, taxonomy, life history, distribution, evolution, and adaptations of birds.
- +518-L. Ornithology Laboratory. 1 hr.
- 519. Mammalogy. 2 hrs. Prerequisite: BSC 361 recommended. Morphology, taxonomy, life history, distribution, evolution, and adaptations of mammals.
- +519-L. Mammalogy Laboratory. 1 hr.

- 521. Marine Invertebrate Zoology. 3 hrs. Morphology, distribution and ecology of the phyla from Protozoa through Protochordates. May be taken as MAR 503.
- 521-L. Marine Invertebrate Zoology Laboratory. 3 hrs. Corequisite for BSC 521. May be taken as MAR 503-L.
- 523. Science and Society: from Copernicus to the Bomb. 3 hrs. Traces the development of science and technology and their role in society from the Renaissance to the present. (Cross-listed as HIS 523 and PHY 585.)
- 524. **Parasites of Marine Animals.** 3 hrs. Prerequisite: Permission of instructor. Emphasis on morphology, taxonomy, life histories, and host-parasite relationships. May be taken as MAR 504.
- 524-L. Parasites of Marine Animals Laboratory. 3 hrs. Corequisite for BSC 524.
- 525. Marine Phycology. 2 hrs. Prerequisites: General botany and plant taxonomy. A survey of the principal groups of marine algae. May be taken as MAR 520.
- 525-L. Marine Phycology Laboratory. 2 hrs. Corequisite for BSC 525. May be taken as MAR 520-L.
- 526. Introductory Mycology. 3 hrs. Prerequisite: Consent of instructor. Systematics, morphology, physiology, and ecology of fungi.
- +526-L. Introductory Mycology Laboratory. 1 hr. Corequisite for BSC 526.
- 527. **Introductory Phycology.** 2 hrs. Prerequisite: Consent of instructor. Taxonomy, physiology, and biochemistry of the algae. May be taken as MAR 520.
- 527-L. Introductory Phycology Laboratory. 1 hr. May be taken as MAR 520L.
- 528. Plant Anatomy. 2 hrs. A study of the anatomy of vascular plants.
- +528-L. Plant Anatomy Laboratory. 1 hr.
- 529. Bryophytes and Vascular Plants. 3 hrs. Life cycles, evolution, and morphology of bryophytes and vascular plants.
- +529-L. Bryophytes and Vascular Plants Laboratory. 1 hr.
- 530. Aquatic and Marsh Plants. 2 hrs. Collection, identification, and ecology of plants of fresh and brackish water.
- +530-L. Aquatic and Marsh Plants Laboratory. 1 hr.
- 531. **Plant Physiology.** 3 hrs. Prerequisite: Organic chemistry recommended. The basic physiological processes of green plants.
- +531-L. Plant Physiology Laboratory. 1 hr.
- 532. Economic Botany. 2 hrs. Origin, distribution, and significance of plants most important to man.
- +532-L. Economic Botany Laboratory. 1 hr.
- 533. Taxonomy of Local Flora. 2 hrs. The classification of the local flora.
- +533-L. Taxonomy of Local Flora Laboratory. 1 hr.
- 534. Dendrology. 2 hrs. The taxonomic and ecological characteristics, and the distribution of trees.
- +534-L. Dendrology Laboratory. 1 hr.
- 535. Plant Ecology. 2 hrs. Prerequisite: Advanced standing in botany. Relationship of plants to their environment.
- +535-L. Plant Ecology Laboratory. 1 hr.
- 537. Coastal Vegetation. 2 hrs. A study of general and specific aspects of coastal vegetation, with emphasis on local examples. May be taken as MAR 521.
- 537-L. Coastal Vegetation Laboratory. 1 hr. Corequisite for BSC 537. May be taken as MAR 521L.
- 538. Salt Marsh Plant Ecology. 2 hrs. The botanical aspects of local marshes: includes plant identification, composition, and structure. May be taken as MAR 522.
- +538-L. Salt Marsh Plant Ecology Laboratory. 2 hrs. Corequisite for BSC 538. May be taken as MAR 522L.
- 539. Marine Ecology. 3 hrs. The relationship of marine organisms to their environment. May be taken as MAR 505.
- +539-L. Marine Ecology Laboratory, 2 hrs. Corequisite for BSC 539, May be taken as MAR 505L.

- 540. **Ecology.** 2 hrs. Prerequisite: Consent of instructor. The study of the relationships of organisms to their environment and to each other.
- +540-L. Ecology Laboratory. 1 hr.
- 541. Population and Community Ecology. 2 hrs. Collection, analysis, and interpretation of data on natural populations and communities.
- +541-L. Population and Community Ecology Laboratory. 1 hr.
- 542. Behavioral Ecology and Sociobiology. 3 hrs. The adaptive significance of behavior.
- 543. Freshwater Biology. 1 hr. Prerequisite: Consent of instructor. The study of the biota of ponds, lakes, rivers, and streams.
- +543-L. Freshwater Biology Laboratory. 2 hrs.
- 544. Limnology. 2 hrs. Prerequisites: BSC 540 and consent of instructor. The physical, chemical and biological dynamics of inland waters.
- +544-L. Limnology Laboratory. 1 hr.
- 545. Introduction to Biological Oceanography. 3 hrs. Prerequisites: BSC 110, 111, 201. Marine biological regimes and the influence of geological, physical, and chemical oceanographic factors.
- +545-L. Introduction to Biological Oceanography Laboratory. 1 hr. Corequisite for BSC 545.
- 546. Aquaculture. 2 hrs. Prerequisites: 12 hours of biology and 8 hours of chemistry. Production of aquatic organisms in natural and artificial environments.
- +546-L. Aquaculture Laboratory. 1 hr.
- 547. Marine Aquaculture. 3 hrs. Problems and procedures relating to the culture of commercially important crustaceans, fish, and mollusks. May be taken as MAR 507.
- 547-L. Marine Aquaculture Laboratory. 3 hrs. Corequisite for BSC 547. May be taken as MAR 507L.
- 548. Fauna and Faunistic Ecology and Tidal Marshes. 1 hr. Taxonomy, distribution, trophic relationships, reproductive strategies and adaptation of tidal marsh animals. May be taken as MAR 506.
- 548-L. Fauna and Faunistic Ecology of Tidal Marshes Laboratory. 3 hrs. Corequisite for BSC 548. May be taken as MAR 506L.
- 549. Marine Fisheries Management. 2 hrs. Prerequisite: statistics recommended. A statistical review of the world fisheries. May be taken as MAR 510.
- 549-L. Marine Fisheries Management Laboratory. 2 hrs. Corequisite for BSC 549. May be taken as MAR 5101
- 550. General Physiology. 3 hrs. Organismic function and the adaptations which characterize major animal groups.
- 551. Mammalian Physiology. 3 hrs. The functions of mammalian systems; interrelationships and regulation are emphasized.
- 552. Environmental Physiology. 3 hrs. Physiological adaptations enabling animals to meet environmental challenges.
- 553. **Invertebrate Physiology.** 3 hrs. A functional approach to the major invertebrate phyla.
- 554-L. Physiology Laboratory. 2 hrs. Experimental techniques in physiology. To be taken once only, as an optional laboratory with BSC 450, BSC 451, BSC 452, or BSC 453.
- 555. Animal Behavior. 3 hrs. Classical and current concepts of animal behavior including individual and social behavioral patterns.
- +555-L. Animal Behavior Laboratory. 1 hr.
- 560. Pharmacology. 3 hrs. Prerequisites: Vertebrate biology and organic chemistry. The response of living organisms to drugs.
- 561. Histology. 4 hrs. Prerequisite: 12 hours of biology. Microscopic anatomy of mammalian organ systems.
- +561-L. **Histology Laboratory.** Must be taken concurrently with BSC 561; no separate credit given for the laboratory.
- 562. Microtechnique. 1 hr. Techniques for sectioning, mounting, and staining tissue and making whole mounts.
- +562-L. Microtechnique Laboratory. 2 hrs.

- 563. Pathobiology. 2 hrs. Prerequisite: BSC 461 or 561. Principles of histopathology in vertebrates and invertebrates.
- +563-L. Pathobiology Laboratory. 1 hr.
- 564. Microscopy. 2 hrs. Theory and use of the electron microscope and associated instrumentation, and darkroom techniques.
- +564-L. Microscopy Laboratory. 1 hr.
- 565. Embryology. 2 hrs. Maturation, fertilization, cleavage, histogenesis, and organogenesis.
- +565-L. Embryology Laboratory. 2 hrs.
- 566. Human Embryology. 3 hrs. Prerequisite: BSC 465 or 565. Factors which activate and regulate developmental processes.
- 567. Diseases of Aquatic Animals. 2 hrs. Bacterial, fungal, viral and parasitic diseases of freshwater and marine fish, shellfish, and crustacea.
- +567-L. Diseases of Aquatic Animals Laboratory. 2 hrs.
- 568. Comparative Histology of Marine Organisms. 3 hrs. Histology of Marine organisms, including tissue processing techniques. May be taken as MAR 530.
- +568-L. Comparative Histology of Marine Organisms Laboratory. 3 hrs. Corequisite for BSC 569. May be taken as MAR 530L.
- 569. **Developmental Biology.** 3 hrs. A comprehensive survey of the experimental, genetic, and molecular analysis of processes that occur during the development of complex organisms.
- 571. Advanced Genetics. 2 hrs. Prerequisite: BSC 370 or 475 or 575. A continuation of BSC 370.
- +571-L. Advanced Genetics Laboratory. 3 hrs. Corequisite for BSC 571. Laboratory exercises to illustrate basic genetic principles.
- 575. **Medical Genetics.** 3 hrs. The basic principles of human genetics with emphasis on the causation of abnormality and disease.
- 576. Molecular Biology. 3 hrs. Prerequisite: BSC 370 or 477. Molecular biology of viral, prokaryotic and eukaryotic systems.
- 577. Microbial Genetics. 3 hrs. Prerequisites: BSC 370, 380. The genetics and molecular biology of microorganisms and viruses.
- +577-L. Microbial Genetics Laboratory. 1 hr. Prerequisite: Permission of instructor. Laboratory exercises to demonstrate principles of bacterial and viral genetics. Must be taken concurrently with BSC 577.
- +578-L. **Molecular Biology Laboratory**, 4 hrs. Prerequisite: BSC 576 or 577 or permission of instructor. The paradigms of molecular biology in a laboratory setting.
- 581. Pathogenic Microbiology. 3 hrs. Schemes for isolation and identification of major groups of diseaseproducing microorganisms.
- +581-L. Pathogenic Microbiology Laboratory. 1 hrs.
- 582. Advanced Pathogenic Microbiology. 2 hrs. Continuation of BSC 581.
- +582-L. Advanced Pathogenic Microbiology Laboratory. 2 hrs.
- 584. Virology and Tissue Culture. 3 hrs. Viral classification, replication, and biochemistry; tissue culture technology.
- +584-L. Virology and Tissue Culture Laboratory. 1 hrs.
- 585. Viral Pathogenesis and Diagnosis. 3 hrs. Host-viral interaction from a pathological and immunological viewpoint.
- +585-L. Viral Pathogenesis and Diagnosis Laboratory. 1 hr. Principles of viral serology and isolation.
- 586. Immunology and Serology. 3 hrs. Studies of infection, resistance, types of immunity and hypersensitivity.
- +586-L. Immunology and Serology Laboratory. 1 hr. A laboratory introduction to cellular and serologic immune reactions and their diagnostic usefulness.
- 587. Microbial Physiology. 3 hrs. A comprehensive survey of bacterial structure, nutrition, and biochemistry.
- +587-L. Microbial Physiology Laboratory. 1 hr.

- 588. Food Microbiology. 2 hrs. Microorganisms affiliated with the preparation, spoilage, pathogenicity, and sanitation of foods.
- +588-L. Food Microbiology Laboratory. 2 hrs.
- 589. Microbial Pollution of Water. 2 hrs. Control of pure water supply.
- +589-L. Microbial Pollution of Water Laboratory. 2 hrs.
- 590. Marine Microbiology. 3 hrs. Prerequisite: General Microbiology. An introduction to the role of microorganisms in the overall ecology of the oceans and estuaries. May be taken as MAR 509.
- 590-L. Marine Microbiology Laboratory. 2 hrs. Corequisite for BSC 590. May be taken as MAR 509L.
- 604. Early Life History of Marine Fishes. 2 hrs. Reproductive strategies and early developmental processes of marine fishes. May be taken as MAR 604.
- 604-L. Early Life History of Marine Fishes Laboratory. 2 hrs. Corequisite for BSC 604. May be taken as MAR 604L.
- 648. Aquatic Insect Ecology. 2 hrs. Prerequisites: BSC 411, 440, 443.
- +648-L. Aquatic Insect Ecology Laboratory. 1 hr.
- 691. Research. 1-16 hrs.
- 692. Special Problems. 2-6 hrs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs.
- 707. Planktology. 2 hrs. Prerequisite: Permission of instructor. Morphological adaptations and life histories of plankton.
- +707-L. Planktology Laboratory. 1 hr.
- 717. Advanced Herpetology. 2 hrs. Systematics, natural history, distribution, and economic importance of reptiles and amphibians.
- +717-L. Advanced Herpetology Laboratory. 1 hr.
- 740. **Topics in Marine Biology.** 2 hrs. Current topics in marine research.
- 741. Fisheries Biology. 2 hrs. Prerequisite: BSC 416 or 516, or consent of instructor. Statistics and management of exploited fish populations.
- +741-L. Fisheries Biology Laboratory. 1 hr.
- 742. Advanced Biological Oceanography. 2 hrs. Prerequisite: BSC 441 and 541. The sea as a biological environment.
- +742-L. Advanced Biological Oceanography Laboratory. 1 hr.
- 743. Marine Ecology. 2 hrs. Prerequisite: BSC 441 or 541. The marine environment and the ecology of marine organisms.
- +743-L. Marine Ecology Laboratory. 1 hr.
- 750. Physiology of Marine Animals. 3 hrs. The environmental physiology of marine animals.
- 751. **Seminar in Animal Behavior.** 3 hrs. Topics in the behavior and ecology of animals.
- 752. Seminar in Physiology. 2 hrs. Special topics in physiology in areas of individual interest.
- 760. Cell Ultrastructure. 3 hrs. Prerequisite: Permission of instructor. Structure and function of cells and cell organelles at the sub-cellular level.
- 776. **Topics in Gene Regulation.** 4 hrs. An intensive review of the recent primary literature in molecular genetics and molecular biology, as defined by the topic chosen each semester.
- 780. Principles of Immunochemistry. 3 hrs. A study of the chemistry of antigens, antibodies and complement and the mechanism of their interaction.
- +780-L. Principles of Immunochemistry Laboratory. 1 hr.

- 781. Immunohematology. 3 hrs. A study of serological genetic, and anthropological aspects of human blood groups, isoantigens and antibodies.
- 782. Advanced Microbial Physiology. 4 hrs. Concepts of microbial nutrition, metabolism, adaptation, and genetics as related to growth and environment.
- 789. Microbiology Seminar. 1 hr. The presentation and defense of current, classical concepts and principles of microbiology. May be repeated for credit.
- 790. Biology Seminar. 1 hr. The presentation of current concepts in special areas of individual interest.
- 791. **Research in Biology.** 1-16 hrs. Prerequisite: Approval of the major professor.
- 792. Special Problems. 2-6 hrs.
- 793. Research in Zoology. 1-6 hrs.
- 795. Research in Genetics. 1-9 hrs.
- 796. Research in Microbiology. 1-9 hrs.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 898 Dissertation, 12 hrs.

### **BUSINESS TECHNOLOGY EDUCATION (BTE-105)**

- 552. **History and Philosophy of Vocational Education.** 3 hrs. For business and distributive education teachers. History, concepts, trends, occupations, employment opportunities, procedures, and techniques.
- 553. **Techniques of Coordination.** 3 hrs. Techniques and procedures used in coordinating office occupations and DE programs.
- 554. Methods and Materials in Teaching Distributive Education. 3 hrs. Principles, concepts, program plans, curricula, methods and materials, activities, research, and evaluation.
- 555. **Organization and Administration of Distributive Education.** 3 hrs. Basic problems, objectives, and characteristics of DE programs as applied in their development.
- 560. Administrative Office Management. 3 hrs. Principles of management; office organization, procedures, and supervision; layout, supplies, machines, personnel, forms, reports, and services.
- 565. Microcomputers in Business Education. 3 hrs. Skill development in use of multiple software packages relative to business education.
- 567. Desktop Publishing & Presentation Graphics. 3 hrs. Office-based microcomputer production of typeface/graphics enhanced media, designed to be both pleasing in appearance and effective in communication.
- 577. **Medical Transcription.** 3 hrs. Prerequisites: BET 102 or equivalent and 108. Emphasis on medical terminology, records, and forms with transcription from tapes.
- 578. Advanced Medical Transcription. 3 hrs. Prerequisite: BET 577. Emphasis on additional medical terminology, with increased emphasis on transcription.
- 579. Review for the Certified Professional Secretary Examination. 3 hrs. Preparation for CPS Examination. Does not count as credit toward a degree.
- 580. Research and Report Writing. 3 hrs. Concepts and methods of business research and style; problems in researching and reporting business data in written form.
- 592. **Special Problems.** 1-6 hrs. Study approved and directed by the department chairman.
- 602. Concepts and Practices in Word Processing. 3 hrs. To acquaint business teachers with word processing equipment and provide an overview of evolving concepts and practices in word processing, including the use of computers in WP, with "hands-on" keyboarding application. Laboratory included.
- 608. Curricula in Business Education. 3 hrs. Factors influencing curriculum construction; content organization, instructional materials, and techniques.

- 651. Principles of Business Education. 3 hrs. Junior high through university programs; guidance; qualifications and professional activities of teachers; and public relations.
- 652. Seminar in Business Education. 3 hrs. An intensive study of specific problems in business education, and a survey of literature pertaining to the problems.
- 653. Improvement of Instruction in Nonskill Subjects, 3 hrs. Methodology, instructional materials, evaluation, and review of significant research in the nonskill subjects of bookkeeping, basic business, and consumer economics.
- 655. Improvement of Instruction in Skills Subjects. 3 hrs. Teaching procedures, instructional materials, measurement of skills, standards of achievement, and review of related research in typewriting, shorthand, and transcription.
- 669. Research and Evaluation in Business Education. 3 hrs. Concept of evaluation; construction, selection, administration, and scoring of tests; review of related research.
- 680. Readings in Business Education. 3 hrs. Readings in both periodical literature and research. Presentation of findings in a scholarly report. Approval of department chairman required.
- 691. Research in Business Education, 1-16 hrs.
- 692. Special Problems I, II, III. 1 hr. each. Prerequisite: 9 semester hours of advanced courses in business education. Scholarly paper on approved problem.
- 694. Field Problems. 3 hrs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs.
- 701. **Seminar in Business Education.** 3 hrs. Analysis and evaluation of significant research studies in the field of business education and research of a problem.
- 750. **Business Education in the Junior College.** 3 hrs. Forces affecting junior college business curricula; philosophy; programs; public relations; trends, and related research.
- 760. Administration and Supervision of Business Education. 3 hrs. Principles; techniques of administration and supervision of business education in junior high, senior high, evening schools, and colleges.
- 780. Readings in Business Education. 3 hrs. Readings in both periodical literature and research. Presentation of findings in a scholarly report.
- 791. Research in Business Education, 1-16 hrs.
- 794. Field Problems, 1-3 hrs.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using the other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 798. Specialist Thesis. 1-6 hrs.

## **CHEMISTRY AND BIOCHEMISTRY (CHE-320)**

- 500. Chemical Literature. 2 hrs. Prerequisites: CHE 256 and 311. The selection and use of the reference materials of chemistry: periodicals, journals, texts, patents, and other sources of information.
- 504. Spectral Elucidation of Structure. 3 hrs. Prerequisite: Permission of the instructor. Applications of vibrational, electronic, nuclear magnetic resonance, and mass spectroscopy to structure determination.
- 505. Problems in Chemistry. 3-6 hrs. Prerequisite: Undergraduate coursework in the area and permission of the instructor. An intensive review of specialized areas in chemistry.
- 506. Modern Chemical Problem Solving I. 3 hrs. Prerequisite: Permission of instructor. Techniques of solving relevant problems relating to the quantitative aspects of chemical reactions.

- 507. **Modern Chemical Problem Solving II.** 3 hrs. Prerequisite Permission of instructor. Solving problems relating to chemical dynamics, periodicity and bonding.
- 509. Chemistry Laboratory Teaching. 1 hr. Prerequisite: Permission of the instructor. Instruction and practice for teaching assistants in the academic chemistry laboratory.
- 510. Safety Principles and Procedures in the Chemical Sciences. 1 hr. Prerequisite: CHE 256 or permission of instructor. Common laboratory hazards and their remediation. (May be taken as PSC 510).
- 511. Instrumental Analysis. 3 hrs. Prerequisite: CHE 462. Theory and practice of instrumental methods of analysis; absorption spectroscopy, magnetic resonance, mass spectroscopy, electrometric methods and fundamental electronics.
- +511-L. Instrumental Analysis Laboratory. 1 hr. Corequisite: CHE 511. A laboratory designed to accompany CHE 511.
- 521. Biochemistry I. 3 hrs. Prerequisite: 256. The properties of amino acids, proteins, carbohydrates, lipids, and nucleic acids; actions of enzymes and protein synthesis.
- +521-L. **Biochemistry I Laboratory**. 2 hr. Corequisite: CHE 521. An optional laboratory course to accompany CHE 521.
- 522. **Biochemistry II.** 3 hrs. Prerequisite: 521. Major metabolic pathways with emphasis on energy considerations and inter-relationships of the pathways.
- +522-L. **Biochemistry II Laboratory.** 2 hr. Prerequisite: CHE 521-L. Corequisite: CHE 522. A continuation of CHE 521-L.
- 523. Analytical Biochemistry. 3 hrs. Prerequisite: CHE 521. A survey of methods used by biochemists to detect and characterize biologically important molecules.
- 531. **Inorganic Chemistry**, 3 hrs. Prerequisite: CHE 462. Electronic state transitions and spectra, coordination chemistry, reaction kinetics and mechanisms, special topics.
- 531-L. Inorganic Chemistry Laboratory. 1 hr. Corequisite: CHE 531. A laboratory designed to accompany CHE 531.
- 532. Descriptive Inorganic Chemistry. 3 hrs. Prerequisite: CHE 531. Models, concepts, bonding and periodic trends in inorganic chemistry, special topics.
- 551. Qualitative Organic Analysis. 4 hrs. Prerequisite: CHE 256. The systematic identification of pure organic compounds and the analysis of mixtures. Includes 6 hrs. of laboratory per week.
- 561. Physical Chemistry, 3 hrs. Prerequisite: Permission of the instructor. Chemical Thermodynamics.
- +561-L. Laboratory for CHE 561. 1 hr. A laboratory designed to accompany CHE 561. Concurrent registration in CHE 561 is required.
- 562. Physical Chemistry. 3 hrs. Prerequisite: Permission of the instructor. Kinetics and Quantum Chemistry.
- +562-L. **Laboratory for CHE 562.** 1 hr. A laboratory designed to accompany CHE 562. Concurrent registration in CHE 562 is required.
- 600. Chemical Safety in the Teaching Laboratory. 3 hrs. Prerequisite: Permission of the instructor.

  Application of the principles of chemical safety to the creation of a safe environment in high school and college science laboratories.
- 601. Introductory Structural Chemistry. 3 hrs. Prerequisite: Permission of the instructor. A study of symmetry including group theory and point group designation, stereochemistry, and the origin of spectra.
- 605. Chemical Analysis I. 2 hrs. Prerequisites: CHE 311 and CHE 256. Separation methods including chromatography and centrifugation. Includes three hours of laboratory per week.
- 606. Chemical Analysis II. 2 hrs. Prerequisites: CHE 311 and CHE 256. NMR, ESR, mass spectrometry and x-ray diffraction. Includes three hours of laboratory per week.
- 607. Chemical Analysis III. 2 hrs. Prerequisites: CHE 311 and CHE 256. IR, UV-visible, ORD, CD, AA spectroscopy, flame photometry and fluorimetry. Includes three hours of laboratory per week.
- 608. Chemical Analysis IV. 2 hrs. Prerequisites: CHE 311 and CHE 256. Radiochemical, electrochemical, electrophoretic and thermal analysis. Data handling. Includes three hours of laboratory per week.
- 609. Applied Descriptive Chemistry. 3 hrs. Prerequisite: Permission of the instructor. Principles of chemical periodicity applied to a laboratory based study of reactivity.

- 611. Advanced Analytical Chemistry. 3 hrs. Prerequisite: CHE 411 or permission of instructor. Sampling techniques, equilibria and activity, chemical and physical separations, and chemical methods of analysis.
- 621. Advanced Biochemistry. 3 hrs. Prerequisite: Permission of instructor. The inter-relationships of metabolic pathways with emphasis on control mechanisms.
- 651. Advanced Organic Chemistry. 3 hrs. Prerequisite: Successful completion of Organic Qualifying Examination or in special instances, permission of the instructor. The structure of organic compounds and its relationship to chemical bonding, stereochemistry, resonance, and reactivity.
- 652. Advanced Synthetic Organic Chemistry I, 3 hrs. Prerequisite: CHE 651. The synthesis of organic compounds emphasizing modern reagents and methods.
- 661. Advanced Physical Chemistry. 3 hrs. Prerequisite: Successful completion of Physical Chemistry Qualifying Examination, or in special instances, permission of the instructor. Molecular and thermodynamic basis for chemical phenomena. Emphasis: Applications of thermodynamics and statistical thermodynamics to chemical disciplines.
- 689. Chemistry Seminar. 1 hr.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs. Prerequisite: Consultation with and permission of major professor.
- 702. Photochemistry. 3 hrs. Prerequisite: CHE 651 or permission of instructor. An introduction to the physical and chemical properties of the excited state.
- 711. Analytical Spectroscopy. 3 hrs. Prerequisite: CHE 411. Quantitative determinations by I.R., visible, U.V., and x-ray spectroscopy techniques including atomic emission and absorption.
- 713. Analytical Separations. 3 hrs. Prerequisite: Permission of instructor, Gas, ion exchange, and thin layer chromatography; precipitation and crystallization; zone refining and electromigration.
- 719. Current Topics in Analytical Chemistry, 3 hrs. Prerequisite: Permission of instructor. Current topics of interest such as electroanalytical chemistry, instrumentation, chemometrics, new spectroscopic methods, etc.
- 721. Proteins. 3 hrs. Prerequisite: CHE 521 or permission of instructor. Protein purification, methods of primary, secondary, and tertiary structure determinations, and the relationship between structure and biological activities.
- 722. Physical Biochemistry. 3 hrs. Prerequisite: CHE 521. Application of physical-chemical methods to the study of biological macromolecules.
- 723. Enzymes, 3 hrs. Prerequisite: CHE 521. Mechanisms of enzyme action, and the kinetics, regulation, and synthesis of enzymes.
- 725. Lipids, 3 hrs. Prerequisite: Permission of instructor. Study of the structure, functions, and metabolism of lipids.
- 726. Hormone Biochemistry. 3 hrs. Prerequisite: Permission of instructor. The structure, biosynthesis, secretion, regulation, and mode of action of hormones.
- 729. Current Topics in Biochemistry. 3 hrs. Prerequisite: Permission of instructor. Topics of current interest in biochemistry such as neurochemistry, plant molecular biochemistry, photosynthesis, aging, hormonal control.
- 739. Current Topics in Inorganic Chemistry. 3 hrs. Prerequisite: Permission of instructor. Topics of current interest such as transition metal complexes, reaction mechanisms or physical methods.
- 751. Physical Organic Chemistry. 3 hrs. Prerequisite: CHE 651. Selected topics including application and use of quantum mechanics, kinetics, cryoscopy, isotopes, etc., to organic chemistry.
- 752. Mechanisms of Organic Reactions. 3 hrs. Prerequisite: CHE 651. Mechanisms of organic reactions with emphasis on stereochemistry, kinetics, thermodynamics, and new developments as reported in the chemical literature.

- 755. Chemistry of Liquid Crystals. 3 hrs. Prerequisite: CHE 651. Survey of the structure, synthesis, and properties of the liquid crystalline state.759. Current Topics in Organic Chemistry. 3 hrs. Prerequisite: Permission of instructor. Topics of current interest in organic chemistry such as natural products, stereochemistry, novel synthetic methodology.
- 761. Special Topics in Statistical Thermodynamics. 3 hrs. Prerequisite: CHE 661 or permission of instructor. Statistical mechanical theory and techniques applied to calculations of thermodynamics properties. Topics: theory of liquids, real gas behavior, etc.
- 763. **Introduction to Quantum Chemistry.** 3 hrs. Prerequisite: CHE 661 or permission of instructor. Development of quantum theory relating to energy levels and bonding in chemical systems.
- 764. **Elements of Diffraction.** 4 hrs. Scattering, phase relationships, and structural techniques via diffraction for gases, liquids, solutions, and solids. Includes 3 hours of laboratory per week.
- 769. Current Topics in Physical Chemistry. 3 hrs. Prerequisite: Permission of instructor. Topics of current interest in physical chemistry such as magnetic resonance, quantum theory, etc.
- 789. Chemistry Seminar. 1 hr.
- 791. **Research in Chemistry.** 1-15 hrs. Prerequisite: Approval of major instructor.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 811. Analytical Electrochemistry. 3 hrs. Prerequisite: Permission of instructor. Thermodynamics of electrochemistry, theoretical derivation of electrochemical techniques and applications thereof.
- 821. Biosynthetic Pathways. 3 hrs. Prerequisite: Permission of instructor. An indepth study of selected metabolic pathways.
- 822. Nucleic Acid and Protein Synthesis. 3 hrs. Prerequisite: CHE 621 or permission of instructor. Protein and nucleic acid biosynthesis, with emphasis on biological control mechanisms.
- 831. Organometallic Compounds. 3 hrs. Prerequisites: CHE 631 and 651 or permission of instructor. The preparation, structure, physical properties and chemical reactions of compounds containing carbonmetal and carbon-metalloid bonds.
- 851. A Survey of Heterocyclic Chemistry. 3 hrs. Prerequisite: CHE 651. Nomenclature, synthesis, and reactions of the more common heterocyclic system.
- 861. Special Topics in Quantum Chemistry. 3 hrs. Prerequisite: CHE 661. Topics of current interest in quantum chemistry such as magnetic resonance, electron spectroscopy, etc.
- 862. Chemical Kinetics. 3 hrs. Experimental techniques of measuring chemical reaction rates and the mathematical treatment of rate data.
- 898. Dissertation. 12 hrs.

### **CHILD DEVELOPMENT (CD-805)**

- 550. Administration of Programs for Young Children. 3 hrs. Prerequisite: 3 hrs. in Child Development. Evaluation of policies and procedures; organizational structure and management will be emphasized.
- 551. **Infant Development.** 3 hrs. Emphasis will be given to the development and behavior of the infant. Supervised experiences included.
- 552. Child Development Methods and Materials. 3 hrs. Provisions are made to evaluate and select materials for use in developing teaching techniques and planning play activities for children. Includes weekly laboratory experiences.
- 553. Creative Activities for the Preschool Child. 3 hrs. A study of creative activities for preschool children. Includes weekly laboratory experiences.
- 555. Supervised Participation. 6 hrs. Prerequisite: CD 452. Directed participation in programs for young children.
- 578. Specialized Studies in Developmental Disabilities. 1-6 hrs. Specialized study and skill acquisition in the area of developmental disabilities. Topics vary.
- 598. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.

- 650. Advanced Child Development. 3 hrs. A study of the child through the preschool years, investigated in light of personality development theories and current research.
- 652. Current Trends and Theories in the Field of Child Development. 3 hrs. A survey of selected theories in Child Development and an examination of current problems and critical issues.
- 654. Seminar in Child Development. 3 hrs. May be repeated for a total of 6 hours. Selected topics in Child Development.
- 655. Practicum in Child Care Administration, 3 hrs.
- 678. Assessment and Intervention for Handicapped Children 0-5. 3 hrs. Current issues and theories regarding assessment and intervention procedures for at-risk and handicapped young children, birth through 5.
- 688. Medical Aspects of Developmental Disabilities. 3 hrs.
- 691. Research in Child Development. 1-16 hrs.
- 692. Special Problems in Child Development. 1-4 hrs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis, 1-6 hrs. for a total of 6 hrs.

### COMMUNICATION

#### Mass Communication (MC-208)

- 607. Mass Communication Theory. 3 hrs. Examination of diverse theoretical approaches to the study of mass communication; theory building in mass communication.
- 609. Communication Seminar. 3 hrs. A rotating seminar that addresses topics in the areas of Radio-TV-Film and Journalism.
- 621. **Seminar in Public Relations.** 3 hrs. Course will examine various topics essential to public relations practitioners such as law, management, and public relations planning; will include lectures by practicing professionals in public relations.
- 625. Process and Effects of Mass Communication. 3 hrs. A study of the major areas of mass communication research literature, emphasizing mass communication effects research.
- 629. Communication Internship. 3 hrs. Students will serve an internship during one semester with a professional media or public relations agency.
- 691. **Research in Communication.** 1-9 hrs. For independent reading projects of broad general nature. Normally limited to topics not covered in regular courses.
- 692. Special Problems. 3 hrs. For independent research projects designed to answer specific questions in applied or theoretical communication.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 3-6 hrs., for a total of 6 hrs.
- 699. British Studies: Comparative National Media Systems. 3-6 hrs. To instruct students through lectures, research, and field trips about the similarities and differences between the American and British media systems.
- 720. Introduction to Graduate Research in Communication. 3 hrs. Analysis of types of problems, concepts, variables, definitions, designs measurement techniques, and interpretation of data prevalent in communication research. Involves elementary statistics and development of research proposals and designs. May also be taken as SCM 720.

- 721. Content Analysis of Communication. 3 hrs. Study of theory and methods of defining, categorizing, coding, and interpreting verbal and non-verbal elements of the communication process. Emphasizes source and message elements. Elementary statistical analysis, research report, and design of studies. May also be taken as SCM 721.
- 722. Communication Research Methods. 3 hrs. A study of the techniques and strategies used in conducting empirical studies of communication. Topics will include measurement, sampling, and content analysis. May also be taken as SCM 722.
- 740. Telecommunication Policy and Regulation. 3 hrs. A study of U.S. telecommunication policy and regulation as shaped by technology, industry, politics, government, and the public. Social and political implications of policy are evaluated.
- 747. **International Communication Systems**. 3 hrs. An overview of international communications: comparative broadcasting systems, international broadcasting, world press.
- 760. Seminar in Mass Communication History. 3-6 hrs. Exploration of cultural, economic, intellectual, social and political trends in mass communication history, 1450 to present. May be repeated for a total of six hours credit.
- 770. Seminar in Advertising. 3-6 hrs. Analysis of problems and processes of advertising, with special emphasis upon theories, principles and research. May be repeated for a total of six hours credit.
- 780. Media, Culture and Society. 3-6 hrs. Critical analysis of cultural, economic, political, social and technological dimensions of contemporary mass media performance. May be repeated for total of six hours credit.
- 791. **Research in Communication.** 1-9 hrs. For independent reading projects of a broad general nature. Normally limited to topics not covered in regular courses.
- 792. **Special Problems.** 3 hrs. For independent research projects designed to answer specific questions in applied or theoretical communication.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

  Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 809. Communication Seminar. 3 hrs. A rotating seminar that addresses topics in the areas of Radio-TV-Film and Journalism.
- 862. Seminar in Mass Media Control and Ethics. 3 hrs. Alternate years. Problems and case studies concerned with regulation, deregulation, industry codes, and ethics.
- 898. Dissertation. 3-12 hrs, for a total of 12 hours.

### Journalism (JOU-212)

- 505. Problems in Newspaper Production. 3 hrs. Practical training in the production of student newspapers and advising of staffs.
- 521. **Public Relations.** 3 hrs. Introduction to the professional practice of public relations, emphasizing its function and process, publics, tools and media of communications, and professional ethics.
- 522. **Public Relations Writing.** 3 hrs. Concentrates on designing total public relations packages for public, business, and non-profit organizations. Requires production of a publicity campaign.
- 525. **Business and Professional Publications.** 3 hrs. Writing, editing, designing, and producing publications used in public relations communication with emphasis on magazines.
- 528. Public and Press Relations Management. 3 hrs. Emphasizes systematic analysis of clients and publics, formulation of goals and strategies, and multimedia communications. Evaluation of effectiveness and budget preparation included. Case studies and field project.
- 529. Internship in Public Relations. 3 hrs.
- 550. History of Journalism. 3 hrs. Major events, issues and personalities of American mass media examined within interdisciplinary framework. Historical relations of print media and public institutions emphasized.
- 552. Press and Society. 3 hrs. Study of the relationship between the press and the culture and institutions of society.
- 555. **Media Ethics.** 3 hrs. Examination of major moral dilemmas, issues and practices of mass media through lectures and case studies, with emphasis on moral decision-making.

- 560. Press Law and Ethics. 3 hrs. Rights and constraints of the press, including libel, privacy, copyright, monopoly, contempt, regulation, and other aspects of mass media law.
- 570. Newspaper Organization and Management. 3 hrs. Study of the interrelationships of the various departments in newspaper organizations of varying circulation sizes and management techniques used to direct their activities.
- 580. **Seminar in Journalism**. 3 hrs. Examination of theoretical concepts in Journalism and the setting for their application.
- 598. **British Studies in Photography.** 3-6 hrs. Lecture and research in British Photography offered abroad under the auspices of the Institute of Anglo-American Studies.
- 599. British Studies in Journalism. 3-6 hrs. Lecture and research in British Journalism offered abroad under the auspices of the Institute of Anglo-American Studies.

### Radio-Television-Film (RTF-220)

- 507. Theories of Mass Communication. 3 hrs. An analysis of processes and effects of mass communication.
- 516. **Telecommunication Media Management.** 3 hrs. Examination of management responsibilities in broadcast radio and TV, cable TV, and other electronic media and media delivery systems.
- 525. **Telecommunication Media Research.** 3 hrs. Prepares students to utilize and evaluate professional telecommunication research services and to conduct elementary studies of media audiences.
- 531. Advertising Management and Sales. 3 hrs. Prerequisite: RTF 330. A continuation of RTF 330, with emphasis upon case studies in advertising management and sales.
- 540. Advanced Television Production. 3 hrs. Prerequisite: RTF 340 or permission of instructor. Advanced topics in video post-production theory and practice.
- 547. **Television Production Workshop.** 2 hrs. Prerequisites: RTF 340 and 440 or permission of instructor. A flexible format course designed to serve the career objectives and needs of advanced students. The workshop may involve large or small group productions or individual projects, or some combinations.
- 548. Seminar in Radio-TV. 3 hrs. Prerequisite: Permission of instructor. Examination of a telecommunication topic. May be repeated with a different topic or combined with RTF 578 for a total of six credit hours.
- 560. **Issues in Telecommunication.** 3 hrs. Examination of structural, regulatory, policy, and social concerns related to the U.S. telecommunication industry.
- 573. **The Documentary Film.** 3 hrs. Evaluation of the documentary tradition in film through viewing and analysis of selected documentaries and review of pertinent literature.
- 574. Techniques in Film Acting and Directing. 3 hrs. A course designed for advanced film and acting students in the techniques of performing before the motion picture camera.
- 575. Film Business Procedures and Management. 3 hrs. Prerequisite: Consent of instructor. Study of the business practices and problems involved in film production.
- 576. British Studies: The British Film. 3-6 hrs.
- 577. Advanced Film Production Workshop. 3 hrs. Prerequisite: Consent of instructor. Students enrolled in this course will serve as director, cinematographer or film editor of a complete 16mm motion picture production.
- 578. **Seminar in Film.** 3 hrs. Prerequisite: Permission of instructor. Examination of a film topic. May be repeated with a different topic or combined with RTF 548 for a total of six hours.
- 579. Film Theory and Criticism. 3 hrs. Study of major film theories through study of the literature of film theory and screening and discussion of selected films.
- 580. Comparative Media Systems. 3 hrs. Study of the structure, function, and historical/ political features of the electronic media systems of selected nations.
- 581. International Broadcasting. 3 hrs. Prerequisite: permission of instructor. An examination of the development, structure, functions, programming, and audiences of international broadcasting services.
- 589. Caribbean Mass Media Systems. 3 hrs. Prerequisite: Consent of instructor. Lecture and research on the media systems of the Caribbean Basin with special attention given to coverage of Third World news.
- 692. Special Problems in Radio, Television, and Film. 1-3 hrs. Prerequisites: Consent of instructor. The student analyzes a problem area and proposes a special course arrangement with a faculty member. Problems range from television, film productions, writing scripts, to writing extensive research papers.

#### Speech Communication (SCM-216)

- 598. Teaching Public Speaking. 1-3 hrs. Provides instruction on how to teach public speaking. Emphasis on course assignments, grading, classroom management.
- 599. **British Studies in Communication.** 3-6 hrs. Communication research and practice in Great Britain. Taught only in Great Britain under auspices of the Institute of Anglo-American Studies.
- 600. Speech Communication Theory & Research. 3 hrs. A survey of major research traditions in the field of speech communication. Topics will include persuasion, nonverbal communication, networks, and theories of communication.
- 605. **Interpersonal Communication.** 3 hrs. A comparative approach to the study of interpersonal communication theories and methods.
- 609. Speech Communication Seminar. 3 hrs. A rotating seminar that addresses topics in Speech Communication.
- 610. Problems in Organizational Communication. 3 hrs. Analysis of work organizations as communication networks. Emphasis on identification, analysis of selected problems, consultation methods, and administration of communication training programs. Field project.
- 692. **Special Problems.** 3 hrs. For independent research projects designed to answer specific questions in applied or theoretical communication.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 3-6 hrs. for a total of 6 hours.
- 715. **Message Processes and Effects.** 3 hrs. Examines construction and structuring of messages by communicators to form conversation, the effects of messages upon receivers, and factors which affect construction, structuring, and reception of messages.
- 720. Introduction to Graduate Research. 3 hrs. Analysis of types of problems, concepts, variables, definition, design measurement techniques, and interpretation of data prevalent in communication research. Involves elementary statistics and development of research proposals and designs. May also be taken as MC 720.
- 721. Content Analysis. 3 hrs. Study of theory and methods of defining, categorizing, coding, and interpreting verbal and non-verbal elements of the communication process. Emphasizes source and message elements. Elementary statistical analysis, research report, and design of studies. May also be taken as MC 721.
- 722. Communication Research Methods. 3 hrs. A study of the techniques and strategies used in conducting empirical studies of communication. Topics will include measurement, sampling, and content analysis. May also be taken as MC 722.
- 730. Theory and Research in Small Group Communication. 3 hrs. A study of human interaction in small group settings and the determinants and effects of such interaction.
- 735. **Rhetorical Theory.** 3 hrs. A study of the development of rhetorical theory, ancient through contemporary. The course will examine classical, medieval, Renaissance, and late European rhetoricians, and re-emergence of rhetorical theory in the twentieth century.
- 750. Theory and Research in Nonverbal Communication. 3 hrs. A study of nonverbal communication and its relation to effective oral communication. Topics include gender and cultural differences, detecting deception, persuasive strategies.
- 792. Special Problems. 3 hrs. For independent research problems designed to answer specific questions in applied or theoretical communication.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 809. Speech Communication Seminar, 3 hrs. A rotating seminar that addresses topics in Speech Communication.
- 898. **Dissertation.** 3-12 hrs., for a total of 12 hrs.

### **COMMUNITY HEALTH SCIENCES (CHS-750)**

- 508. **Health Education Methods.** 3 hrs. A survey of teaching methods that are appropriate for health education program delivery.
- 509. Community Health Education Planning. 3 hrs. Diagnostic phases preceding program development, skills in planning, organization, and implementation of health education programs in the community.
- 510. **School Health Education Planning.** 3 hrs. Diagnostic phases preceding program development, skills in planning, organization, and implementation of school health education programs.
- 511. **Health Education Curriculum Development.** 3 hrs. Coordination of curriculum development, content selection, and scope and sequence.
- 512. **Measurement and Evaluation in Health Education.** 3 hrs. Instruments and techniques for measuring and evaluating personal health.
- 514. Consumer Health. 3 hrs. The importance of consumer education as related to advertising theory and methods, health misconceptions, health services, medical quackery and health products.
- 520. Communicable and Chronic Disease in Man. 3 hrs. Problems, control programs, and prevention of communicable and chronic disease.
- 522. **Drugs and the Whole Person**. 3 hrs. Psycho-social, medical, legal, and health aspects of drugs (including alcohol) and their abuse.
- 525. Health Administration. 3 hrs. Application of management principles to health care organizations; e.g. strategic planning, marketing, human resource management.
- 527. **Health Policy.** 3 hrs. The role of the health educator in the development of public health policy, influencing social policy, and planning for social change.
- 530. Human Sexuality. 3 hrs. Physical, emotional, and social aspects of human sexuality.
- 531. Sexuality Education. 3 hrs. Theory, methods, and materials for planning, organizing, and implementing sexuality in school and community settings.
- 536. Stress Management Techniques. 3 hrs. Theory and application of primary prevention strategies in stress management programs.
- 537. **Health Education in Clinical Settings.** 3 hrs. Analysis of the role, methods and technology of Health Education pertaining to health care clinics and patient education.
- 538. Workplace Health Promotion. 3 hrs. Study of health education theory and practice as applied to occupational health.
- 540. Introduction to Biostatistics, 3 hrs. Introduction to epidemiological and biomedical statistical analysis. Application to analytic epidemiologic and descriptive/inferential statistical methods in health services research.
- 560. Long Term Care Policy and Administration. 3 hrs. Introduction to Long Term Care Policy and Administration involving public and private programs and practice of health care for the elderly and special populations.
- 578. **Specialized Studies in Developmental Disabilities.** 1-6 hrs. Specialized study and skill acquisition in the area of developmental disabilities. Topics vary.
- 590. Special Topics. 1-3 hrs.
- 597. Professional Collaboration for Developmental Disability Services. 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.
- 598. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.
- 599. **British Studies**. 3-6 hrs. Involves variable topics. Lectures and supervised research in England. Offered exclusively through the USM Institute of Anglo-American Studies.
- 601. **Introduction to Community Health Practice.** 3 hrs. An overview and orientation to the U.S. health delivery system with emphasis on community networks and programs.
- 611. Internship in Community Health. 3-9 hrs. Supervised professional experience in a selected community health setting.
- 622. **Epidemiology.** 3 hrs. A study of epidemiological concepts and methods related to incidence and prevalence of disease.

- 623. **Biostatistics.** 3 hrs. Prerequisite: one course in statistics. Application of statistics to public health data. Test include simple and complex, ANOVA, ANCOVA, and multiple regression.
- 640. **Traffic Systems Management.** 3 hrs. An overview of agencies and systems involved in the management of vehicular traffic.
- 655. **Environmental Health.** 3 hrs. Basic knowledge and skills required to assess impact of the environmental hazards on the nation's health.
- 656. Social and Behavioral Aspects of Health. 3 hrs. Social and behavior determinants of health, illness, and sick role.
- 657. Financial Aspects of Health Care. 3 hrs. An introduction to the financial aspects of health care in which payment systems, budgeting, and the application of quantative information in health care finance is concerned.
- 678. Assessment and Intervention for Handicapped Children 0-5. 3 hrs. Current issues and theories regarding assessment and intervention procedures for at-risk and handicapped young children, birth through 5.
- 680. Research Techniques. 3 hrs. Problems, evaluation of problems and procedures, types and techniques of research.
- 688. **Medical Aspects of Developmental Disabilities.** 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.
- 691. Research. 1-16 hrs. Prerequisite: Approval of major instructor.
- 692. Special Problems in Safety. 3 hrs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 3 or 6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.
- 710. Seminar, 3 hrs.
- 720. Community Organization for Health Education. 3 hrs. Communities and community organizations as they relate to health services and health education.
- 744. **Behavioral Problems in Safety Programs.** 3 hrs. A study of behavioral, attitudinal, and motivational issues in a variety of safety programs.
- 746. Administration and Supervision of Safety Programs. 3 hrs. Administration and supervision of governmental, industrial, agency, and community safety programs.
- 792. Special Problems in Health. 3 hrs.

## **COMPUTER ENGINEERING TECHNOLOGY (CET-325)**

- 501. Microprocessor Architecture and Applications. 3 hrs. Corequisite: CET 501L. Microprocessor architecture and applications; I/O interfaces; memory organization. Not open to Masters of Engineering Technology candidates who have backgrounds in computer, electrical or electronics engineering technology.
- +501-L. Microprocessor Laboratory. 1 hr. Corequisite: CET 501.
- 520. Embedded Microcomputer Design. 3 hrs. Prerequisite: CET 501. Corequisite: CET 520L. Embedded computer applications with microprocessor circuit design and commercial product development.
- +520-L. Embedded Microcomputer Design Laboratory. 1 hr. Corequisite: CET 520.
- 571. Small Computer Systems. 3 hrs. Prerequisite: CET 501. A study of control units, arithmetic units, memories, and microprogramming concepts.
- +571-L. Small Computer Systems Laboratory. 1 hr. Corequisite: CET 571.
- 572. Advanced Programmable Logic Circuits. 3 hrs. Corequisite: CET 572L. Fundamentals and applications of synchronous and asynchronous design through the use of advanced VLSI programmable logic devices.
- +572-L. Programmable Logic Circuits Laboratory. 1 hr. Corequisite: CET 572.

- 577. Introduction to Control Systems Technology. 3 hrs. Prerequisites: CET 323 and EET 312. Corequisite: CET 577L. Fundamental control system theory and applications; servomechanisms; process control; controllers, measurements and instrumentation.
- +577-L. Introduction to Control Systems Technology Laboratory. 1 hr. Corequisite: CET 577.
- 578. Digital Control Systems. 2 hrs. Prerequisite: CET 571. Design of control systems incorporating a computer as an on-line element. Design of control algorithms and introduction to optimal control.
- +578-L. Digital Control Systems Laboratory. 1 hr. Corequisite CET 578.
- 592. Special Problems. 1-3 hrs. Supervised study in the area of computer engineering technology.
- +672. **Digital Systems III**. 3 hrs. Prerequisite: CET 571. Fault detection in digital systems and fault tolerant computing.
- 692. Special Problems. 1-3 hrs. Supervised study in the area of computer engineering technology.

### COMPUTER SCIENCE AND STATISTICS (CSS-330)

- +500. **Introduction to Computer Education.** 3 hrs. A practical, hands-on introduction to the instructional utility and administrative uses of computers in education. Cannot be used to satisfy any Computer Science MS requirements.
- +501. Computer Skills for Research. 3 hrs. Prerequisite: CSS 240. Editing of data files, computer system utilization, use of BMD, SPSS, MINITAB for processing research data. Cannot be used to satisfy Computer Science MS requirements.
- +502. Structured Basic Programming. 3 hrs. Prerequisite: CSS 500. Technical presentation of BASIC with scientific problem solving, algorithms and introduction to data structures. Cannot be used to satisfy Computer Science MS requirements.
- +503. Authoring Systems for Computer Based Learning. 3 hrs. Prerequisite: CSS 500. Developing computer based instructional modules utilizing the authoring system approach. Cannot be used to satisfy Computer Science M.S. requirements.
- 504. Functional Programming with LOGO. 3 hrs. Prerequisite: CSS 500. An introduction to the functional style of programming using the LOGO programming language. This course cannot be used to satisfy any degree requirements in the College of Science and Technology.
- 515. Methods of Mathematical Statistics I. 3 hrs. Prerequisite: MAT 168. Continuous and discrete distribution, t-test, Chi-square test and analysis of variance.
- 516. Methods of Mathematical Statistics II. 3 hrs. Prerequisite: CSS 515. Orthogonal polynomial contrasts, multi-way classification anova, simple and multiple linear regression, polynomial regression.
- 518. Sampling Methods. 3 hrs. Prerequisite: CSS 515. The planning, execution and evaluation of sample surveys. Simple random sampling, stratified random sampling, cluster sampling.
- +630. Communications Engineering Fundamentals. 3 hrs. Prerequisite: Permission of instructor. Basic concepts of components and systems which provide electrical communications. Does not apply to Computer Science degree.
- +631. Analog and Digital Communications. 3 hrs. Prerequisite: CSS 630. Principles and techniques of analog and digital communications. Fourier analysis of various modulation and multiplexing methods. Does not apply to Computer Science degree.
- +632. Communication Systems Analysis. 3 hrs. Prerequisite: CSS 631. Principles and techniques for analyzing the technical performance of voice and data communication systems. Does not apply to Computer Science degree.
- 633. **The Computer and Communications.** 3 hrs. Prerequisite: CSS 632. The operation of and uses for digital computers in a communications context. Does not apply to Computer Science degree.
- 636. Stochastic Processes and Queuing Theory. 3 hrs. Prerequisite: MAT 385. Poisson process, Markov processes and Queuing theory.
- +637. Least Squares Techniques. 3 hrs. Prerequisite: CSS 516. Regression analysis, curvilinear regression, discriminant and factor analysis.

# **COMPUTER SCIENCE (CSC-333)**

510. Operating Systems and Multiprocessing. 3 hrs. Prerequisites: CSC 306, 306L, 308, MAT 420. Corequisite: CSC 510-L. Continuation of CSC 306. Emphasis on intra-system communication.

- +510-L. Operating Systems and Multiprocessing Laboratory. Corequisite: CSC 510.
- 511. Database Management Systems Design. 3 hrs. Prerequisites: CSC 306, 307. Design and implementation of DBMS. Survey of research literature.
- 512. **Introduction to Artificial Intelligence.** 3 hrs. Prerequisite: CSC 308. Concepts and techniques of intelligent systems. Survey of research literature.
- 513. Algorithms. 3 hrs. Prerequisite: CSC 308. Design and analysis of algorithms. Complexity theory.
- 515. **Theory of Programming Languages.** 3 hrs. Prerequisite: CSC 308. Formal treatment of programming language translation and compiler design concepts.
- 544. **Robotic Systems: Theory, Development, and Analysis.** 3 hrs. Prerequisite: MAT 326. Robotic system development, direct kinematics, the arm equation, workspace analysis, trajectory planning and robotic programming methodologies.
- 585. **Information Retrieval in the U.K.-Theory.** 3 hrs. Prerequisite: Permission of the instructor. Design of British information processing systems.
- 586. **Information Retrieval in the U.K.-Applications.** 3 hrs. Prerequisite: Permission of the instructor. Design of information processing systems.
- 616. Automata, Computability, and Formal Languages. 3 hrs. Prerequisite: CSC 415. Formal models of computation. Computability, complexity, languages.
- +620. Formal Methods in Programming Languages. 3 hrs. Prerequisite: CSC 616. Data and control abstractions. Backtracking and nondeterminism. Functional and logic programming. Program specification and verification.
- 623. Analytical Models for Computer Systems. 3 hrs. Prerequisite: CSC 410. Examination of the major models that have been used to study operating systems and the computer systems which they manage. Petri nets, data flow diagrams, and other models of parallel behavior. Fundamentals of queuing theory.
- 624. Computer Communication Networks and Distributed Processing. 3 hrs. Prerequisite: CSC 623. Study of networks of interacting computers. Problems, rationales, and possible solutions for both distributed processing and distributed databases. Major national and international communication protocols will be presented.
- 626. Advanced Computer Architecture. 3 hrs. Prerequisite: CSC 410. Introduction to various architectures and techniques which have been developed or are proposed in the literature. Pipelined architecture, dynamic system architecture, data flow architecture, array processing.
- 629. Applied Combinatorics and Graph Theory. 3 hrs. Prerequisite: CSC 616. Study of combinatorial and graphical techniques for complexity analysis including generating functions, recurrence relations, Polya's theory of counting, and NP complete problems.
- +632. **Artificial Intelligence.** 3 hrs. Prerequisites: CSC 412. Relatively unfocused, relatively focused, Heuristic, and probabilistic reasoning. Production rule systems. Knowledge-based and expert systems. Survey of current research.
- 633. Distributed Database Systems. 3 hrs. Prerequisite: CSC 623. A consideration of the problems and opportunities inherent in distributed databases on a network computer system. Includes file allocation, directory systems, mutual exclusion, deadlock detection and prevention, synchronization, query optimization, and fault tolerance.
- 634. Information Storage and Access. 3 hrs. Prerequisites: CSC 411. Advanced data structures, file structures, and databases, with an emphasis on specialized problem areas. Access and maintenance issues.
- 635. Computer Graphics. 3 hrs. Architecture of display systems, basic 2-D and 3-D mathematics, 3-D viewing and geometry, advanced surface mathematics, advanced architectures for raster and vector displays, hidden line and hidden surface problems, realistic imaging, software design for 3-D systems.
- 636. Modeling and Simulation. 3 hrs. A study of the construction of models which simulate real systems. Includes probability and distribution theory, statistical estimation and inference, the use of random variates, and validation procedures. A simulation language is used for the solution of typical problems.
- +638. Advanced Computer Algorithms. 3 hrs. Prerequisite: CSC 413. Study of recent advances in algorithm design and analysis.
- +640. Mathematical Programming. 3 hrs. Linear programming. Modeling, simplex method and modification, duality. Networks and integer programming algorithms.

- 645. Expert Systems. 3 hrs. Prerequisite: CSC 632. Review of classical expert systems. Study of knowledge representation, acquisition and epistemology to formulate rule based systems. Study of inference engines using statistics, Bayes' Theorem, Heuristic Techniques.
- 690. Seminar in Computer Science. 1 hr.
- 691. **Topics in Computer Science**. 3 hrs. Special topics in Computer Science of current interest to faculty and students, e.g., Robotics, neural networks, pattern recognition. May be repeated for credit at discretion of academic adviser.
- 695. Directed Study. 1-3 hrs. Individual study by a student on an area or problem approved by the student's academic adviser.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

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- 698. Thesis. 1-6 hrs. For a total of 6 hrs. Credit deferred until thesis is completed.
- 699. Project. 1-3 hrs. For a total of 3 hrs.

### **CONSTRUCTION ENGINEERING TECHNOLOGY (BCT-393)**

- 554. Estimating I. 3 hrs. Prerequisite: Permission of instructor. Corequisite: BCT 554L. Material quantity survey techniques used in estimating costs of construction.
- 554-L. Estimating I Laboratory. 1 hr. Corequisite: BCT 554.
- 555. Estimating II. 3 hrs. Prerequisite: BCT 554. Corequisite: BCT 555L. Determination of construction cost, bidding procedures, and analysis of job cost data.
- 555-L. Estimating II Laboratory. 1 hr. Corequisite: BCT 555.
- 558. Construction Planning and Scheduling. 3 hrs. Prerequisite: Permission of the instructor. Corequisite: BCT 558L. Critical Path Method (CPM) as a project planning, scheduling, and monitoring technique.
- 558-L. Construction Planning and Scheduling Laboratory. 1 hr. Corequisite: BCT 558.
- 576. Construction Labor. 3 hrs. A study of construction labor resources, labor history, and governmental labor regulations.
- 577. Construction Project Management. 3 hrs. Duties and responsibilities of a construction manager. Services provided by CM firms.
- 578. **Applications of Construction Law.** 3 hrs. Analysis of construction law and the construction process; legal problems in the bidding process and in the performance of the contract.
- 592. Special Problems. 1-3 hrs. Prerequisites: Senior standing and approval of faculty adviser.

# **COOPERATIVE EDUCATION (CED-099)**

+500. Cooperative Education Work Term. 0 hr.

# **CRIMINAL JUSTICE (CJ-281)**

- 500. Graduate Practicum in Criminal Justice. 3-9 hrs. Blends theory and practice in a public or private criminal justice career field. It will not count toward course requirements in the degree.
- 520. **Methods of Criminal Justice Research and Planning.** 3 hrs. An indepth study of criminal justice planning, evaluation and research.
- 526. Comparative Criminal Justice Systems. 3 hrs. A study of foreign criminal justice systems with emphasis on how they suggest possible reforms for the American system.
- 530. Criminal Procedure. 3 hrs. A survey of procedural criminal law. Due process, statute of limitation, venue, and double jeopardy are covered.
- 533. Evidence, Search, and Seizure. 3 hrs. An examination of laws of evidence and the procedures for obtaining it with special emphasis on application in criminal court.
- 540. Police in the United States. 3 hrs. A study of the policies and human issues affecting law enforcement agencies in the United States.
- 550. Administration of Criminal Corrections. 3 hrs. An in-depth study of administration of the correctional systems. To include: management, the incarceration process, probation, and parole.

- 551. Probation, Parole, and Community Corrections. 3 hrs. Course examines probation and parole systems, other alternatives to incarceration, and rehabilitative features available for offenders.
- 560. Juvenile Justice Systems. 3 hrs. A study of police in delinquency prevention, investigation of juvenile crime, disposition of offenders, and juvenile courts.
- 561. Juvenile Corrections. 3 hrs. Course provides the student interested in juvenile corrections with an indepth perspective of the numerous treatment modalities currently in use.
- 563. Family Law. 3 hrs. An indepth study of common law and statutory law relating to the family emphasizing legal remedies to violence and its effects on the criminal justice system.
- 570. Political Economy of Criminal Justice. 3 hrs.
- 571. Victims of Crime. 3 hrs. Provides an in-depth study of factors that affect the victims of crime. Specific crimes are studied and remedies explored.
- 580. Seminar in Criminal Justice. 3 hrs. A seminar course dealing with all aspects of the criminal justice system, tying together the knowledge of criminal justice previously learned.
- 589. Caribbean Studies. 3 hrs. A comparative study of criminal law, courts, and corrections through lectures, field exercises, and research.
- 598. British Studies: Comparative Criminal Jurisprudence. 3-6 hrs. A comparative study abroad of criminal law, courts, and procedures.
- 599. British Studies: Comparative Drug Law. 3-6 hrs. A comparative study of the instructional responses to drug abuse and related criminal offenses and an analysis of their differences.
- 625. Seminar in Criminal Justice Planning and Research. 3 hrs. Prerequisites: A basic statistics course or its equivalent and consent of instructor. A study of criminal justice planning methodology and research requirements.
- 630. Seminar in Civil Liberties and Criminal Law. 3 hrs. A study of the legal and moral responsibility of the criminal justice system to individual rights.
- 631. Seminar in Anglo-American Criminal Law and Procedure. 3 hrs. A detailed study of topics in English criminal law and procedure oriented toward understanding the basis of American criminal justice and solutions to common problems.
- 640. **Seminar in Legal Issues in Police Administration**. 3 hrs. A study of legal issues involved in the administration of a modern police agency.
- 650. Seminar in Comparative Methods of Treatment in Corrections. 3 hrs. An analysis of comparative treatment methodologies utilized by correctional programs throughout the United States and in Europe.
- 660. Seminar in Juvenile Law. 3 hrs. Prerequisite: CJ 460/560 or approval of professor. An in-depth study of specific problems in the law pertaining to battered, neglected and delinquent children and their families.
- 692. Special Problems. 1-3 hrs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

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- 698. Thesis, 1-6 hrs, for a total of 6 hrs.
- 699. Seminar in Advanced Topics in Comparative Criminal Justice. 3 hrs. Prerequisite: CJ 426/526 or approval of professor. Study abroad of selected topics of foreign criminal justice systems. Emphasis is on theory.

# **CURRICULUM AND INSTRUCTION: ELEMENTARY (CIE-115)**

- 503. **Kindergarten-Primary Education.** 3 hrs. A practicum designed to give teaching experiences in understanding the social, emotional, and cognitive growth and development of children.
- 512. Diagnosis and Remediation of Reading Disability for the Classroom Teacher. 3 hrs. Prerequisites: CIE 306 and 309. Provides relevant practicum experiences in evaluation and gives extended opportunities in child tutoring appropriate to grades 2-8.
- 540. Supervision for Effective Student Teaching. 1 hr. Introduction to the University of Southern Mississippi's student teaching program and the roles and responsibilities of associated personnel.

- 542. Computational Errors in Elementary Mathematics. 1 hr. The identification and remediation of pupil errors in addition, subtraction, multiplication, and division of whole numbers.
- 578. Specialized Studies in Developmental Disabilities. 1-6 hrs. Specialized study and skill acquisition in the area of developmental disabilities. Topics vary.
- 591. The Reading Conference. 3 hrs. An intensive program consisting of lectures, group discussion and demonstration lessons. Only three hours may be used for degree purposes.
- 594. Learning Resources in Early Childhood Education. 3 hrs. Students will become acquainted with learning sources, selection, use and production of multimedia materials for kindergarten and primary education.
- 595. British Studies in Early Childhood Education. 1-6 hrs. Compares and contrasts the philosophies and current trends of American and British early childhood education.
- 598. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.
- 599. **British Studies: Studies in British Education.** 1-6 hrs. Three hours of lectures dealing with education in British education.
- 600. Curriculum Development and Teaching Approaches in Multicultural Education. 3 hrs. Provides an introduction to multicultural education with emphasis on curriculum development and teaching techniques.
- 602. **Procedural Errors in Mathematics.** 3 hrs. A workshop in the identification and remediation of procedural errors in the basic operations of elementary school arithmetic.
- 606. Teaching Language Arts in the Elementary Grades. 3 hrs. The basic concepts of language teaching and learning with consideration of all the language arts and their interrelationships.
- 615. Student Discipline Techniques and Procedures for Teachers and Administrators. 3 hrs. Provides a comprehensive overview of strategies for disciplining students.
- 616. **Teacher/Administrator Legal Rights and Responsibilities.** 3 hrs. Provides a comprehensive overview of the legal rights and responsibilities for teachers and administrators.
- 622. **Supervision and Curriculum in Reading.** 3 hrs. The role of reading supervisors and school administrators in developing and implementing programs for improvement of reading instruction in the schools.
- 678. Assessment and Intervention for Handicapped Children 0-5. 3 hrs. Current issues and theories regarding assessment and intervention procedures for at-risk and handicapped young children, birth through 5.
- 688. Medical Aspects of Developmental Disabilities. 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.
- 691. Research in Reading. 1-16 hrs. Designed to provide a student with the opportunity to pursue an individual research project or to make an intensive review of reading research on a selected topic.692. Special Problems I, II, III. 1 hr. A problem study to be approved by the department chairman to develop knowledge and facility in a field of interest of the student. Preparation of a scholarly paper is required.
- 692. Special Problems I, II, III. 1 hr. each. A problem study to be approved by the department chairman to develop knowledge and facility in a field of interest of the student. Preparation of a scholarly paper is required.
- 694. **Field Problems in Production I, II.** 3 hrs. Prerequisite: Approval of the department chairman. This course provides students with an opportunity to study local school problems in a field setting under the supervision of a graduate professor.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 3 hrs. Credit deferred until thesis is completed.704. Reading for Different Cultural Groups. 3 hrs. Reviews the research relating to the culturally different, specifically relating to characteristic differences and effective teaching materials and methodologies.

- 705. Modern Concepts in Reading Skill Development. 3 hrs. An intensive development of the skills required in classroom reading emphasizing methods and materials required to teach the skills.
- 706. **Psychology of Reading.** 3 hrs. Considers the components of the reading process, with emphasis on language and reading approached from a theoretical point of view.
- 713. Advanced Diagnosis and Remediation of Reading Disability for the Classroom Teacher. 3 hrs. Prerequisite: CIE 706. Deals with corrective and remedial reading in the elementary school covering causes of disability, procedures in diagnosis, and classroom remedial treatment.
- 715. Advanced Diagnosis and Remediation of Reading Disability for the Reading Specialist. 3 hrs. Prerequisite: CIE 706. Deals with the role of the reading specialist, reading clinic organization, diagnostic remedial materials and techniques, with limited testing-teaching and clinical observation experiences.
- 717. Professional Relationship in Improved Elementary Programs. 3 hrs. A course designed to investigate behavioral factors and individuals and groups as they affect elementary school environments.
- 720. **Internship in Reading: Public School.** 3-6 hrs. The student is assigned to a public school in a teaching or supervisory capacity under the direct supervision of a reading faculty member in order to develop competency in instruction, administration or clinical skills.
- 721. **Practicum in Remedial Reading for the Reading Specialist.** 3 hrs. Prerequisite: CIE 715. Provides supervisory experiences in diagnosis in prescribing materials for remediation and in directing remedial reading procedures for small groups of reading disability cases.
- 724. Problems of Teaching Mathematics. 3 hrs. Prerequisite: MAT 310 or consent of instructor. A study of elementary school techniques, particularly those related to number concept, of teaching arithmetic based on research studies and current practices.
- 725. Social Studies Education in Elementary School. 3 hrs. A course which deals with programs, practices, trends, and investigation of criteria for evaluating, planning, organizing, and improving social studies programs.
- 726. The Development of the Latin Countries. 3 hrs. A seminar which deals with the historical, political, social, and economic development of the Latin American region.
- 727. Diagnostic Techniques in Elementary Mathematics. 3 hrs. Varied data sources which serve the diagnostic teaching cycle are investigated.
- 728. Curriculum in the Elementary School. 3 hrs. A course involving analysis and evaluation of curriculum elements and procedures in terms of the implications for the individual, the school, and the community. A major paper on a curriculum topic is required.
- 729. **Reading in the Elementary School.** 3 hrs. Provides for extensive study of recent trends in materials and methods in reading in the elementary school including significant related research studies.
- 730. Practicum in Elementary Mathematics. 3 hrs. Prerequisites: CIE 724 and 727, or permission of the instructor. Provides experience in the diagnosis and developmental instruction of elementary pupils and explores related materials.
- 733. Practicum in Diagnosis and Remediation of Reading Disability for the Classroom Teacher. 3 hrs. Prerequisite: CIE 713. Develops the skills necessary in making a complete reading diagnosis including evaluations, interpretations, and recommendations.
- 736. Practicum in Reading Diagnosis. 3 hrs. Prerequisite: CIE 713. Enables the student to work with small groups of corrective reading cases diagnosing needs and teaching corrective lessons.
- 753. **Instructional Management.** 3 hrs. Designed to help school districts develop and manage their educational program through clear instructional objectives and matching test items.
- 756. Developing Community Education. 3 hrs. A course designed to acquaint teachers with the concept of community education and its impact on their role in the classroom through strengthening community ties.
- 762. Research in Elementary Education. 3 hrs. Prerequisite: Advanced graduate status or permission of chairman of department. Designed to familiarize the student with the elements and methods of research, with the representative types of research, and with the major contributions of research to the field of elementary education.
- 768. Children's Literature in the Curriculum for the Early Years: An Awareness, Criteria, and Evaluation. 3 hrs.

- 770. Practicum in Early Childhood Education. 3 hrs. Curriculum planning, administration, and supervision are stressed through research and practice in laboratory settings.
- 772. **Practicum with Parents.** 3 hrs. Parent-teacher-child intrapersonal and interpersonal relationships are investigated through research and practice in laboratory settings.
- 776. **Seminar in Early Childhood Education.** 3 hrs. Emphasis is on early childhood practice, theory, and research and their relatedness to psychological, sociological, and intellectual patterns.
- 777. Evaluation in Early Childhood Education. 3 hrs. An introduction to specific principles and practices relative to group and individual evaluation procedures for early childhood education.
- 778. Creative and Mental Growth. 3 hrs. Research in creative thinking and its relationship to mental growth is emphasized.
- 780. **Research in Child Development.** 3 hrs. A course concerning methods and research in child growth in social, emotional, psychological, and physiological development.
- 782. **History and Philosophy of Early Childhood Education.** 3 hrs. An investigation of Pestalozzi, Froebel, Montessori, and others representing philosophies influencing today's curricula and programs.
- 785. Seminar in Reading Instruction. 3 hrs. Prerequisites: CIE 705, CIE 706, CIE 729. Considers topics pertinent to current research in reading instructions. Topics announced in advance of registration.
- 791. Research in Elementary Education. 1-16 hrs. Prerequisite: Approval of the major professor.
- 792. Special Problems. 3 hrs.
- 794. Field Problems. 3 hrs. Prerequisite: Approval of the department chairman. This course provides students with an opportunity to study local school problems in a field setting under the supervision of a graduate professor.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 798. Specialist Thesis. 6 hrs. Specialist's degree candidates are required to select a significant educational problem for investigation and to present the findings in a scholarly report under the guidance of a graduate committee.
- 862. Seminar in Elementary Education. 3 hrs. Prerequisite: Advanced graduate status or permission of the chairman of the department. A course which is interdisciplinary in nature and focuses upon contributions of research, philosophy, history, sociology, and educational psychology as it applies to the resolution of major issues in elementary education.
- 880. Advanced Graduate Seminar in Education. 1 hr. A series of in-depth discussions and analyses of significant educational problems and issues for students in advanced programs.
- 898. Dissertation. 12 hrs.

# **CURRICULUM AND INSTRUCTION: SECONDARY (CIS-120)**

- 540. Supervision for Effective Student Teaching. 1 hr. Introduction to The University of Southern Mississippi's student teaching program and the roles and responsibilities of associated personnel.
- 541. Foundations of Reading Instruction for the Adult. 3 hrs. This course involves an examination of the basis of reading instruction for the nonliterate adult.
- 542. Methods and Materials for Teaching Adults to Read. 3 hrs. Instructional and diagnostic materials and methods for dealing with functionally illiterate adults.
- 570. Curriculum in the Secondary School. 2 hrs. A course which examines the present-day structure and nature of the secondary school curriculum.
- 578. **Specialized Studies in Developmental Disabilities**. 1-6 hrs. Specialized study and skill acquisition in the area of developmental disabilities. Topics vary.
- 598. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.
- 599. British Studies: Studies in British Education. 1-3 hrs.

- 600. Curriculum Development and Teaching Approaches in Multicultural Education. 3 hrs. Provides an introduction to multicultural education with emphasis on curriculum development and teaching techniques.
- 615. Student Discipline Techniques and Procedures for Teachers and Administrators. 3 hrs. Provides a comprehensive overview of strategies for disciplining students.
- 616. Teacher/Administrator Legal Rights and Responsibilities. 3 hrs. Provides a comprehensive overview of the legal rights and responsibilities for teachers and administrators.
- 688. **Medical Aspects of Developmental Disabilities.** 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.
- 692. Special Problems I, II, III. 1 hr. each. A problem study to be approved by the department chairman to develop knowledge and facility in the field of interest of the student. Preparation of a scholarly paper is required.
- 694. Field Problems. 3 hrs. Prerequisite: Approval of the department chairman. This course provides students with an opportunity to study local school problems in a field setting under the supervision of a graduate professor.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 3 hrs. Credit deferred until thesis is completed.
- 700. Seminar in Secondary Education. 3 hrs. An investigation of the major trends and objectives of the secondary school with emphasis upon the disciplinary areas of the curriculum.
- 701. Algebra for Secondary Teachers. 3 hrs. Consideration is given to the problems relating to the teaching of algebra and a new review of special algebraic principles.
- 705. **Professional Subject Matter in Mathematics.** 3 hrs. A study of ways to enrich the teaching of high school mathematics through the introduction of basic topics and concepts of college mathematics.
- 706. Geometry for Secondary Teachers. 3 hrs. Consideration is given to the problems pertaining to the teaching of high school geometry and a review of special geometric principles.
- 707. **Materials in the Teaching of Mathematics.** 3 hrs. A study of materials to be used in the teaching of secondary school mathematics both in the classroom and in extraclass activities.
- 708. **High School Curriculum**. 3 hrs. An overview of the field of curriculum and instruction at the secondary-school level with special emphasis upon contemporary trends.
- 710. **Mathematics for Junior High School Teachers.** 3 hrs. Prerequisite: To be teaching junior high school mathematics or have at least a minor in college mathematics. Consideration is given to the problems relative to the teaching of mathematics in grades 7, 8, and 9 and to the organization of mathematical subject matter for these grades.
- 723. **Research and Problems in Mathematics Education.** 3 hrs. A seminar for experienced teachers who wish to plan developmental programs of mathematics instruction in light of recent developments.
- 730. Reading and Study Improvement Techniques for the Junior and Senior College Teacher of Reading. 3 hrs. Summarizes research, methods, and techniques of college reading programs including a practicum or internship experience in REF 334.
- 737. **Practicum in Remedial Reading Instruction.** 3 hrs. Provides the student experiences in secondary reading diagnosis and remediation with emphasis on techniques in a practicum setting.
- 750. Advanced Study of Problems and Issues in Teaching Secondary School Social Studies. 3 hrs. Explores inquiry strategies for the social studies classroom and seeks to foster a firm understanding of basic analytical concepts and principles for the experienced social studies teacher.
- 753. **Instructional Management.** 3 hrs. Designed to help school districts develop and manage their educational program through clear instructional objectives and matching test items.
- 754. **Reading in the Secondary Schools.** 3 hrs. A course providing for extensive study of trends in materials and methods in secondary school reading including significant research studies which relate to these.
- 756. **Developing Community Education.** 3 hrs. A course designed to acquaint teachers with the concept of community education and its impact on their role in the classroom through strengthening community ties.

- 791. Research in Secondary Education. 1-16 hrs. Prerequisite: Approval of the major professor.
- 792. Special Problems, 3 hrs.
- 794. Field Problems. 3 hrs. Prerequisite: Approval of the department chairman. This course provides students with an opportunity to study local school problems in a field setting under the supervision of a graduate professor.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 798. Specialist Thesis. 6 hrs. Specialist degree candidates are required to select a significant educational problem for investigation and to present the findings in a scholarly paper under the guidance of a graduate committee.
- 880. Advanced Graduate Seminar in Education. 1 hr. A series of in-depth discussions and analyses of significant educational problems and issues for students in advanced programs.
- 898. Dissertation, 12 hrs.

#### DANCE (DAN-687)

- 553. Advanced Jazz. 2 hrs. The study and application of the principles of jazz movement. May be repeated for a total of six (6) hours.
- 568. Musical Theatre Dance, 2 hrs.
- 587-L. Practicum in Movement. 1-3 hrs. May be taken for a total of 9 hrs.
- 599. British Studies. 3-6 hrs. Studies in dance and movement sciences abroad (5 weeks).

#### **ECONOMIC DEVELOPMENT (ED-265)**

- 551. Theories of Economic Location. 3 hrs. Principals of economic location analysis with emphasis on locational decision-making and investment by different types of businesses. Relevance to economic development is stressed.
- 651. **Methods of Economic Development Research.** 3 hrs. Examines research methods for local, regional, and state economic development agencies. Prerequisite: Consent of instructor.
- 652. Contemporary Issues in Economic Development. 1 to 3 hrs. variable credit. May be repeated for a total of 9 hrs. Examines critical issues facing economic developers with a focus on policy formulation in the Southeastern U.S.
- 653. **Dynamics of Economic Development.** 3 hrs. Theory and practice of spatial aspects of economic development as applied to local, regional, and national economies and to the world market economy.
- 654. Preparing for Community Economic Development. 3 hrs. Provides practical instruction in the operation of a local economic development agency with emphasis on community preparation techniques and concepts.
- 655. Economic Development Finance. 3 hrs. Overview of financing principles for managing a local economic development organization, evaluating strategic development plans and specific projects, and coordinating industrial development incentive packages.
- 656. **Rural Economic Development.** 3 hrs. Focuses on rural development problems with emphasis on the Southeastern U.S.; examines national and state policies and practices for stimulating nonmetropolitan development.
- 657. **Promoting Community Economic Development.** 3 hrs. Provides practical instruction in concepts and techniques for promoting a community, region, or state for new and existing business investments.
- 658. Applied Research Problems in Economic Development. 3 hrs. This is a capstone course designed to challenge and synthesize the student's proficiency in economic development. It consists of several research problems to be completed and successfully defended during the semester. Problems are assigned based on the student's program of courses and specializations.
- 691. **Internship**. 1-9 hrs. May be repeated for a total of 9 hours. Involves placement in an economic development agency and participation in actual agency activities.

- 692. **Special Problems.** 1-6 hrs. May be repeated for a total of 6 hours. Involves study in a specific topic of work in a specific area of research under the direction of a consulting faculty member.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hours. Independent research project initiated, designed, researched, and written by the student under the supervision of a major professor and a thesis committee.

### **ECONOMICS (ECO-610)**

- 520. Managerial Economics. 3 hrs. Prerequisites: Computer literacy, calculus. An examination of microeconomic theory as applied to managerial decision making. See also MBA 520.
- 598. International Economics Seminar Abroad. 3 hrs. Prerequisite: Consent of Program Director. Conducted in London, England: a series of lectures and discussions involving authorities on international economic issues and practices.
- 606. Microeconomic Analysis for Business. 3 hrs. Prerequisites: ECO 201-202 or ECO 520. A study of pricing and resource allocation with emphasis on applying microeconomic concepts.
- 672. **International Trade and Finance.** 3 hrs. Prerequisites: ECO 201-202, FIN 300, and consent of the instructor. A study of international trade theory, balance of payments adjustment mechanisms, exchange rate determination, and the role of the MNC in the international economy.
- 692. Special Problems in Economics. 1-6 hrs.
- 699. International Economics Research Abroad. 3 hrs. Prerequisite: Consent of Program Director. A research course in international economics offered for students enrolled in ECO 598.

#### **EDUCATIONAL ADMINISTRATION (EDA-130)**

- 540. Community Education and the Professional Educator. 1 hr. Introduction to the concept of community education and its importance in building a base of community support for schools.
- 598. British Studies: Studies in British Education. 3 hrs. Provides students with information on various topics related to British education and with field experiences related to British educational institutions.
- 599. British Studies: Research in British Education. 3-6 hrs. To provide students with supervised research study on British education that relates to their interests or educational specialty.
- 600. Basic Course in Educational Administration and Supervision. 3 hrs. The introductory course for teachers and prospective administrators provides an overview of administrative roles in education.
- 601. **Introduction to Community Education.** 3 hrs. Designed to acquaint students with the historical development of community education, and to review the basic components of the community school.
- 615. Student Discipline Techniques and Procedures for Teachers and Administrators. 3 hrs. Provides a comprehensive overview of strategies for disciplining students.
- 616. Teacher/Administrator Legal Rights and Responsibilities. 3 hrs. Provides a comprehensive overview of the legal rights and responsibilities for teachers and administrators.
- 620. **Supervision of Instruction.** 3 hrs. A practical course in supervision for prospective school principals and supervisors of instruction. Deals with principles and procedures of supervision.
- 630. **Organization and Administration of the Elementary School.** 3 hrs. A study emphasizing administrative problems and professional leadership in the elementary school.
- 632. Organization and Administration of the Junior High and Middle Schools. 3 hrs. Examines the Junior High-Middle School function, objectives and program from the viewpoint of the administrator and supervisor.
- 634. **Organization and Administration of the Secondary School.** 3 hrs. The study of practical problems encountered by high-school principals in: scheduling, attendance, discipline, office management, and the selection and supervision of staff.
- 650. School Business Management. 3 hrs. A practical course in the overall aspects of present day school business administration.
- 691. Research, 1-16 hrs. arr.

- 692. Special Problems I, II, III. 1-3 hrs. A problem study to develop knowledge and facility in a field of interest for the student which requires preparation of a scholarly paper under the supervision of a graduate professor.
- 694. Field Problems in Production I and II. 3 hrs. Opportunity to study local school problems under careful supervision of a graduate professor.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.
- 700. Public School Finance. 3 hrs. Emphasizes principles of taxation; local, state, and federal financing of public education; equalization of education opportunity.
- 701. Analysis of Teaching Behavior. 3 hrs. Designed to analyze teaching behavior to determine competency, including interaction analysis and microteaching skills.
- 704. School Community Relations. 3 hrs. A study of school community relations purposes, principles, policies, and procedures.
- 706. Education Facilities Development and Management. 3 hrs. A comprehensive study of the administrative function in facilities, renovation, planning, maintenance, and management.
- 708. Administration of School Personnel. 3 hrs. Stresses administrative relationships involved in developing satisfactory personnel policies, techniques, and regulations.
- 710. School Law. 3 hrs. Legal aspects of such factors as school money, church-state relationships, injury to pupils, student and teacher rights, and related matters.
- 711. Higher Education in the United States. 3 hrs. This course provides an overview of the development, scope, philosophy, objectives, and recent innovations in colleges and universities.
- 712. The Community/Junior College. 3 hrs. This course treats the development, functions, programs, philosophy, issues, and research related to the two-year college.
- 713. Curricula in Higher Education. 3 hrs. A study of undergraduate, graduate, and professional education curriculum development in community/junior and senior colleges.
- 715. Administration and Supervision of College Teaching, 3 hrs. A study of the administration of college faculty personnel services and of techniques for faculty development.
- 717. Continuing Education and Community Service. 3 hrs. The role and scope of continuing education and community service in higher education, including the community college.
- 719. Organization and Administration of Occupational Education in the Community College, 3 hrs. Economic, social, educational and legal bases for occupational education; administration of secondary and community college programs.
- 720. Advanced Curriculum Development, 3 hrs. Designed for the school administrator who has or will have responsibility for curriculum development in a school system.
- 730. Media Skills for Successful School-Community Relations. 3 hrs. Designed to build communication skills needed for a successful school-community relations program.
- 736. Practicum in Educational Administration. 3 hrs. Seminar-experiences in administrative problems from the standpoint of the chief school officer and the central office staff.
- 738. Practicum in Supervision. 3 hrs. Prerequisite: EDA 620. An advanced seminar in supervisory services and current problems from a central office viewpoint.
- 740. Advanced Instructional Supervision. 3 hrs. Designed to develop a systematic approach to instructional improvement that will be of use to the generalist or specialist. Prerequisites: EDA 600 and EDA 620.
- 742. Consensus Decision-Making in Education. 3 hrs. Designed to help school administrators improve their skills in using faculty and community groups in educational decision-making.
- 750. Administrative Workshop I, II, III, and IV. One and one-half hours per week. (Course may be repeated, with only nine hours counting toward a degree.)753. Evaluating Instructional Management. 3 hrs. Provides strategies for assessing instructional management practices.

- 755. **The Superintendency.** 3 hrs. Analyzes roles, responsibilities, and relationships as well as problems and issues associated with the position of school superintendent.
- 756. Developing Community Education. 3 hrs. Designed to acquaint educators and agency representatives with the concept of community education and how it builds a strong base of community support for the schools.
- 780. Educational Leadership Seminar. 3 hrs. The nature and roles of leadership in educational settings with emphasis on self assessment and leadership style in educational decision making.
- 791. Research in Educational Administration, Supervision, and Curriculum. 1-16 hrs. Prerequisite: Approval of the major professor.
- 792. Special Problems, 3 hrs.
- 794. **Field Problems in Administration I, II, III.** 1 hr. A project dealing with a specific problem in school administration. An on-the-job training program with the work being done under the supervision of a graduate professor. This registration must be approved by the departmental chairman upon the recommendation of the student's major professor.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 798. **Specialist Thesis.** 6 hrs. Selection of practical educational problems for solution by candidates for the specialist's degree, using research and professional knowledge. A scholarly report is required.
- 800. Seminar: Theories in Educational Organization and Administration. 3 hrs. This course deals with the theories and concepts underlying present day school organization, administration, and supervision.
- 814. Organization and Administration of Higher Education. 3 hrs. A study of organizational and administrative roles of structure, governance, coordination, control and finance of higher education.
- 816. Seminar in Problems in Higher Education. 3 hrs. Discussion of problems and topics in higher education to be determined by the students and the instructor.
- 889. Special Topics Seminar. 1 hr. (Max. 3 hrs.) A seminar for in-residence doctoral students in educational administration, emphasizing current issues selected by students in consultation with faculty.
- 898. Dissertation. 12 hrs.

# **ELECTRONICS ENGINEERING TECHNOLOGY (EET-398)**

- 512. Advanced Network Analysis. 2 hrs. Prerequisite: Permission of instructor. Corequisite: EET 512L. Transfer functions; network analysis by Laplace transform methods. Not open to Masters of Engineering Technology candidates who have backgrounds in electrical or electronics engineering technology.
- +512-L. Advanced Network Analysis Laboratory. 1 hr. Corequisite: EET 512.
- 561. Electric Power Generation and Distribution. 3 hrs. Power generation and distribution, load flow, faults, grids, and layout.
- 592. **Special Problems.** 1-3 hrs. Supervised study in area of electronics engineering technology related to manufacturing.
- 692. Special Problems. 1-3 hrs. Supervised study in the area of electronics engineering technology.

# **ENGINEERING TECHNOLOGY (ENT-302)**

- 510. Foundations in Computer Aided Drafting and Design. 3 hrs. Fundamentals of computer use for drafting and design using commercial software.
- 520. Computer Aided Drafting and Design II. 3 hrs. Prerequisite: ENT 510. CADD applied to architectural and engineering drawing using AUTOCAD. Graphics programming in two- and threedimensions.
- 530. **Solar Heating and Cooling.** 3 hrs. Corequisite: ENT 530L. Solar energy conversion methods; collectors; residential, commercial solar heating and cooling. Economics of solar energy. Total energy systems.

- +530-L. Solar Heating and Cooling Laboratory. 1 hr. Corequisite: ENT 530.
- 570. **Electronics for Scientists.** 3 hrs. Corequisite: ENT 570L. Practical electronics needed for maximum utilization of scientific instrumentation, automation, and logic circuits.
- +570-L. Electronics for Scientists Laboratory. 1 hr. Corequisite: ENT 570.
- 601. Cost Analysis and Control. 3 hrs. Prerequisite: ENT 390. Applied cost control methods and techniques to establish prices of products for their targeted market segment.
- 620. Advanced Wireframe and Solid Modeling. 3 hrs. Prerequisite: ENT 520 or permission of instructor. CADD techniques for 3-D wireframe and solid modeling.
- 650. Advanced Design Systems in Engineering Technology. 3 hrs. Prerequisite: Permission of instructor. Application of advanced design tools and processes in engineering technology.
- 680. Engineering Technology Seminar. 1-6 hrs. Presentation of engineering technology industrial applications, practices, and problem solutions. May be repeated for a total of 6 hrs.
- 691. **Research.** 1-6 hrs. Investigation of current research and literature in engineering technology; development of writing skills; a thesis/prospectus must be orally defended. A maximum of 3 hrs. can be applied toward a degree in Engineering Technology.
- 692. **Topics in Engineering Technology.** 1-6 hrs. Investigation of specific topics related to engineering technology. May be repeated for a total of 6 hrs.
- 697. Independent Study and Research. 1-12 hrs. Hours arranged. Not to be counted as credit toward degree. Students actively working on a thesis or project, consulting with major professor, and/or using University resources and who are not in residence and are not enrolled in at least 3 hrs. of thesis or project credit must enroll in this course for at least 3 hrs. each semester.
- 698. Thesis. 1-6 hrs. For a total of 6 hours. Credit deferred until thesis is complete.
- 699. **Project.** 1-3 hrs. For a total of 3 hours. Credit deferred until project is complete.

#### **ENGLISH (ENG-224)**

- Advanced Grammar. 3 hrs. Introduces structural and transformational grammar. (Required for secondary or middle-grade certification in English.)
- 503. **Introduction to Linguistics.** 3 hrs. Introduces the principles of descriptive linguistics.
- 506. History of the English Language. 3 hrs. Surveys the development of the English language from Old English to the present.
- 508. Studies in Theoretical Linguistics. 3 hrs. Topics include syntax, phonology, semantics, lexicology.
- 509. Studies in Applied Linguistics. 3 hrs. Topics include field methods, varieties of English, psycholinguistics, sociolinguistics.
- 513. Survey of the Modern Novel. 3 hrs. Examines major British and Continental novels of the last hundred years.
- 515. Survey of Modern Poetry. 3 hrs. Acquaints students with the work of the significant modern poets, as well as the modern period's important poetic innovations and movements.
- 517. **Survey of Modern Drama.** 3 hrs. Studies important British and Continental dramas of the twentieth century.
- 518. Literature and Related Media for Adolescents. 3 hrs. Study of adolescent literature and other related materials for use by and with young people in grades 7-12. (Also offered as LIS 518).
- 519. Studies in World Literature. 3 hrs. Studies Continental, British, and American writers of the nineteenth and twentieth centuries. Repeatable to nine hours.
- 521. Fiction Writing III. 3 hrs. Prerequisites: Graduate standing, permission of the instructor, and enrollment in Center for Writers. Provides an opportunity to develop techniques of fiction writing. Repeatable to nine hours.
- 522. Poetry Writing III. 3 hrs. Prerequisites: Graduate standing, permission of the instructor, and enrollment in Center for Writers. Provides an opportunity to develop techniques of fiction writing. Repeatable to nine hours.
- 523. Creative Non-fiction Writing. 3 hrs. Workshop in writing non-fiction prose: Personal essay, reviews, opinion.
- 525. **Readings in the Theory of Fiction.** 3 hrs. Studies theories and forms of contemporary fiction. Repeatable to six hours.

- 526. **Readings in the Theory of Poetry**, 3 hrs. Studies theories and forms of contemporary poetry. Repeatable to six hours.
- 533. Advanced Technical Writing. 3 hrs. An advanced course in technical writing in which students prepare three or four assignments related to a single research problem.
- 540. Literary Criticism. 3 hrs. Provides a historical approach to the study of literary criticism from the classical period to the present. Emphasis will be on major texts and major critics.
- 551. Chaucer. 3 hrs. Emphasizes a close reading of The Canterbury Tales.
- 554. Shakespeare's Comedies and Tragicomedies. 3 hrs. Studies a selected group of Shakespeare's dramas.
- 555. Shakespeare's Histories and Tragedies. 3 hrs. Studies a selected group of Shakespeare's dramas.
- 556. Survey of Sixteenth-Century British Literature. 3 hrs. Studies the more important British writers of this period.
- 557. Survey of the Development of British Drama to 1642. 3 hrs. Studies British drama from its beginnings to 1642, exclusive of Shakespeare.
- 558. Survey of Seventeenth-Century British Prose and Poetry. 3 hrs. Surveys British literature of the period 1600 to 1660, with emphasis on the "schools" of Donne and Jonson.
- 559. Milton. 3 hrs. Studies the poetry and prose of Milton with emphasis on the major works.
- 560. Survey of British Literature, 1660-1740. 3 hrs. Surveys British literature from the Restoration to 1740.
- 562. Survey of British Literature, 1740-1798. 3 hrs. Surveys British literature from 1740 to 1798.
- 563. Victorian Fiction Prose. 3 hrs. Survey of British fiction and non-fiction prose in the period 1830-1900.
- 564. Survey of the British Novel to 1900. 3 hrs. Studies the development of British fiction from Richardson through Hardy.
- 565. Survey of Nineteenth-Century British Literature: Romantic. 3 hrs. Surveys poetry and prose of the period 1790 to 1830.
- 566. Victorian Poetry and Drama. 3 hrs. Survey of British poetry and drama of the period 1830-1900.
- 567. Survey of Twentieth-Century British Literature. 3 hrs. Studies major twentieth-century British writers, emphasizing novelists and dramatists.
- 568. British Women Writers. 3 hrs. Literature written by British women writers. Variable content.
- 569. **Studies in British Literature.** 3 hrs. Examines various topics in British literature. Repeatable to nine hours.
- 570. Survey of the American Literary Renaissance, 1820-1870. 3 hrs. Examines the writings of Emerson, Thoreau, Hawthorne, Melville, Whitman, and others.
- 571. Survey of the Rise of Realism in American Literature, 1870-1920. 3 hrs. Examines American literature after the Civil War, focusing on the terms realism and naturalism.
- 572. Survey of American Drama. 3 hrs. Studies American drama from its beginnings to the present, with emphasis on the twentieth century.
- 573. Studies in African-American Literature. 3 hrs. Focuses on specific genres, topics, or writers of African-American Literature.
- 577. Survey of the American Novel 1920 to 1960. 3 hrs. Studies techniques and historical backgrounds of the major novelists.
- 578. American Women Writers. 3 hrs. Literature written by American women writers. Variable content.
- 585. Literature of the South. 3 hrs. Emphasizes the fiction, poetry, and drama of Southern writers.
- 589. **Studies in American Literature**. 3 hrs. Studies notable movements, genres, and problems of American literature. Repeatable to nine hours.
- 590. **Reading/Writing Theory and Application.** 3 hrs. Reading/writing theory and applications. Course includes a computer component.
- 596. Caribbean Studies. 3 hrs. Variable content, Lecture series under the auspices of the Center for International Education
- 597. Special Topics in British Literature. 6 hrs. A five-week course taught in London, England, offering an intensive study of special topics in British literature.
- 598. British Studies I, 3-6 hrs. A five-week course taught in London, England. Generally offers an intensive study of topics and figures from the beginning of English literature to 1800.

- 599. British Studies II. 3-6 hrs. A five-week course taught in London, England. Generally offers an intensive study of topics and figures in English literature from 1800 to the present.
- 627. **Introduction to Publishing.** 3 hrs. A practical introduction to the business of publishing, concentrating on publishing and marketing.
- 640. Bibliography and Methods of Research in English. 3 hrs. Instruction in the collection, evaluation, and presentation of research materials.
- 690. Teaching Freshman Composition. 1 hr. Paces English 101 and 102. Provides practical models for writing assignments, teaching techniques, and classroom management for teachers of Freshman Composition. Repeatable to four hours.
- 692. **Special Problems.** 3 hrs. Prerequisite: Consent of instructor. Provides the opportunity to pursue a special topic or area of interest.
- 694. **Teaching Basic Writing.** 3 hrs. Theories and methods of teaching developmental or basic courses in English. Includes a practicum in the Writing Lab or some other tutorial experience.
- 695. Advanced Methods in English. 3 hrs. Analyzes recent theories and practices in the teaching of composition, literature, and language in postelementary institutions. Repeatable to nine hours.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis, 1-6 hrs., for a total of six hours.
- 701. **Seminar in Analysis of Linguistic Structure.** 3 hrs. Examines varying topics but usually treats the theory of language learning and/or its relations to meaning. Repeatable to nine hours.
- 702. Readings in Linguistics. 3 hrs. Examines varying topics, but usually treats practical aspects of classroom problems arising from widely varying dialects in the public schools. Repeatable to nine hours.
- 703. Seminar in Teaching English as a Second Language. 3 hrs. Examines the practical application of linguistic principles to second language teaching.
- 704. **Internship at the English Language Institute.** 7 hrs. Provides participation in all aspects of the English Language Institute, including teaching and testing.
- 714. **Tutorial in English and Germanic Philology**. 3 hrs. Develops specialized area of inquiry unavailable in the regular curriculum.
- 716. **Seminar in Modern World Literature.** 3 hrs. Examines varying topics in British and Continental literature of the twentieth century: authors, movements, and genres. Repeatable to nine hours.
- 721. **Seminar in Fiction Writing.** 3 hrs. Prerequisites: Graduate standing, permission of the instructor, and enrollment in Center for Writers. Workshop in fiction writing. Repeatable to nine hours.
- 722. **Seminar in Poetry Writing.** 3 hrs. Prerequisites: Graduate standing, permission of the instructor, and enrollment in Center for Writers. Workshop in poetry writing. Repeatable to nine hours.
- 744. Seminar in Literary Criticism. 3 hrs. Examines specific issues in critical theory.
- 750. Anglo-Saxon. 3 hrs. Studies the Old English language and representative English literature prior to 1066.
- 751. Beowulf. 3 hrs. Reading Beowulf in Anglo-Saxon.
- 753. Middle English. 3 hrs. Presents readings in Middle English literature exclusive of Chaucer, emphasizing the language and dialects of English from 1100 to 1500.
- 754. Seminar in Medieval Literature. 3 hrs. Studies the works of a major English medieval writer or group of writers. Repeatable to nine hours.
- 758. Seminar in Renaissance Literature. 3 hrs. Studies the works of a major English Renaissance writer or group of writers. Repeatable to nine hours.
- 760. Seminar in Seventeenth-Century British Literature. 3 hrs. Provides extensive study of an author, topic, or genre in seventeenth-century British literature. Repeatable to nine hours.
- 761. Seminar in Eighteenth-Century British Literature. 3 hrs. Provides extensive study of an author, topic, or genre in eighteenth-century British literature. Repeatable to nine hours.

- 763. Seminar in English Romanticism. 3 hrs. Provides extensive study of selected poets and topics from the Romantic Era (1790-1830).
- 764. Seminar in Victorianism. 3 hrs. Provides extensive study of selected authors and topics from the Victorian Era (1830-1910).
- 769. Seminar in Modern British Literature. 3 hrs. Offers an examination of important modern British figures and movements. Repeatable to nine hours.
- 770. Seminar in American Literature I. 3 hrs. Presents a detailed study of selected American writers and movements before 1900. Repeatable to nine hours.
- 771. Seminar in American Literature II. 3 hrs. Presents a detailed study of selected American writers and movements since 1900. Repeatable to nine hours.
- 772. **Readings in American Literature.** 3 hrs. Presents a detailed study of selected American writers and movements. Repeatable to nine hours.
- 773. Seminar in African-American Literature. 3 hrs. Provides a detailed study of selected genres, topics, or writers of African-American literature.
- 790. English Colloquium. 3 hrs. Introduces the theory and practice of teaching college writing, with emphasis on freshman composition. Repeatable to six hours.
- 791. **Research in English.** 1-16 hrs. Prerequisite: Approval of major professor. Must be taken pass/fail. Credit hours do not count toward degree.
- 792. **Special Problems**. 1-6 hrs. Prerequisite: Permission of instructor. Provides the opportunity to pursue a special topic or area of interest.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 898. Dissertation, 12 hrs.

# **ENVIRONMENTAL SCIENCE (ESC-335)**

- 501. Water Quality Analysis. 3 hrs. Prerequisite: CHE 311, MAT 137 or permission of instructor. Sampling and testing for water quality.
- 501-L. Water Quality Laboratory. 1 hr.
- 505. Environmental Impact Statements. 3 hrs. Preparation of environmental impact statements, EIS's, for projects with significant environmental impact.
- 531. **Principles of Industrial Hygiene.** 3 hrs. Detection and control of harmful agents in working environments, such as vapors, gases, mists, radiation, and sound.
- 531-L. Industrial Hygiene Laboratory. 1 hr.

# **FAMILY STUDIES (FAM-830)**

- 550. **Sexuality in the Family.** 3 hrs. Research and theory on the impact of family life cycle changes on sexuality, intimacy, and gender needs and the application of this for the helping professional.
- 551. Marriage Adjustment: Communication and Conflict. 3 hrs. Mate selection, marital adjustment, divorce, and remarriage are examined. Emphasis will be on communication, power struggles, and problem solving in relation to cybernetics theory.
- 553. The Family in Later Life. 3 hrs. An examination of family kinship patterns in later life; relationships with spouse, adult children, and siblings.
- 578. Specialized Studies in Developmental Disabilities. 1-6 hrs. Specialized study and skill acquisition in the area of developmental disabilities. Topics vary.

- 596. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.
- 597. **Professional Collaboration for Developmental Disability Services.** 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.
- 598. British Studies Program: Studies in Family Relations. 3-6 hrs. Current topics, trends, and issues which impact the family. Offered in London, England.
- 640. Advanced Household Equipment. 3 hrs. Study of state-of-the-art technology in household equipment.
- 644. Seminar in Family Economics and Management. 3 hrs. May be repeated for a total of 6 hours.
- 645. Financial Problems of Families. 3 hrs. Study of family resource utilization emphasizing methods of assisting families in effective planning.
- 650. Advanced Family Systems Theory. 3 hrs. Content of human interactions and the process of change in family structures over time is assessed in light of systems theory and family life cycle development theory.
- 651. Parents and Children: Problem Resolution. 3 hrs. A study of both functional and dysfunctional relationship patterns between parents and children/adolescents. Focus is on the systematic intervention process.
- 653. Aging and the Family. 3 hrs. Family-oriented problem solving and its relation to major gerontological issues such as intergenerational struggles, independence, loneliness, alternative living arrangements, etc.
- 654. **Special Topics in Gerontology.** 1-3 hrs. Study of current issues in the field of aging. Topics will vary. May be repeated for a maximum of 9 hours with permission of adviser.
- 655. Marriage and Family Systems Intervention I. 3 hrs. A survey of the major models of systemic interventions such as structural, strategic, integenerational, contextual, and experiential.
- 656. Marriage and Family Systems Intervention II. 3 hrs. Primary systemic interventions will be assessed in light of indications and contraindications for utilization of specific techniques, rational for intervention, and role of therapist.
- 658. Seminar in Family Relations. 3 hrs. May be repeated for a total of 6 hrs. Current topics, trends, and issues which concern and affect families.
- 659. **Professional Seminar in Marriage and Family Therapy**. 3 hr. Prerequisite: Permission of instructor. Legal responsibilities and liabilities of clinical practice and research in family therapy.
- 660. Assessment in Marriage and Family Therapy. 3 hrs. Assessment of dysfunctional relationship patterns using appropriate major mental health assessment instruments and structured techniques designed for systemic intervention.
- 678. Assessment and Intervention for Handicapped Children 0-5. 3 hrs. Current issues and theories regarding assessment and intervention procedures for at-risk and handicapped young children, birth through 5.
- 688. **Medical Aspects of Developmental Disabilities.** 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.
- 690. Practicum in Family and Consumer Studies. 3-9 hrs. Prerequisite: Permission of instructor. Supervised experiences in family and consumer studies.
- 691. Research in Family and Consumer Studies, 1-16 hrs.
- 692. Special Problems in Family and Consumer Studies. 1-4 hrs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.
- 790. Practicum in Marriage and Family Therapy. 1-6 hrs. Prerequisite: FAM 650, FAM 655 and permission of instructor. Supervised clinical training with couples and families. May be repeated.
- 794. Marriage and Family Supervision. 3 hrs. Prerequisite: Permission of Instructor. Major models of marriage and family therapy and supervision are examined.

# FASHION MERCHANDISING AND APPAREL STUDIES (FMA-808)

- 521. **International Fashion Study**. 2-9 hrs. Planned study of international fashion centers with emphasis on clothing, textiles, interiors, and merchandising. May be repeated up to 9 hrs.
- 531. Tailoring. 3 hrs. Prerequisites: Basic construction skills. Principles and techniques of tailoring applied to a suit or coat.
- 537. Principles of Apparel Design and Production. 3 hrs. Prerequisites: CT 332, CT 330 or 334, CT 331, or permission of the instructor. A study of the historical beginnings, the development and current methods used in the design and production of apparel and accessories. Lab emphasis is placed on fashion sketching.
- 631. Seminar in Clothing and Textiles. 3 hrs. Topics to be announced in advance. May be repeated once for a total of 6 hours.
- 633. Flat Pattern Design. 3 hrs. Prerequisite: Basic construction skills. Application of flat pattern design techniques to the creation of dress designs.
- 692. Special Problems in Clothing and Textiles. 1-4 hrs.

#### **FINANCE (FIN-615)**

- 570. Managerial Finance. 3 hrs. Prerequisites: Computer literacy; MBA 511. A study of financial analysis in managerial decision making. See also MBA 570.
- 598. International Financial Seminar Abroad. 3 hrs. Prerequisite: Consent of Program Director. Conducted in London, England: a series of lectures and discussions involving authorities on international financial issues and practices.
- 640. Money and Capital Markets. 3 hrs. Prerequisite: FIN 300. Study of the operations of financial markets and financial institutions and their role in the economy.
- 652. **Problems in Investment.** 3 hrs. Prerequisite: FIN 300. Application of tested and experimental theories by investment managers to problems of short and long-term decision making.
- 692. **Special Problems in Finance.** 1-6 hrs. Prerequisite: Consent of department chair. A supervised course in individual study and research.
- 699. **International Finance Research Abroad.** 3 hrs. Prerequisite: Consent of Program Director. A research course in international finance offered for students enrolled in FIN 598.

# **FOOD AND NUTRITION (FN-815)**

- 510. **Intermediate Nutrition.** 3 hrs. Prerequisite: FN 362, CHE 321. The study of specific nutrient effects on human metabolism. Roles of specific nutrients in metabolic pathways.
- 520. Nutrition in the Life Cycle. 3 hrs. Prerequisites: FN 362, BSC 250, BSC 251, CHE 251. Nutrient needs during the life cycle, including impact of food habits, socioeconomic, and physiological changes on nutrient requirements and intakes.
- 520-L. **Nutrition in the Life Cycle Laboratory.** 2 hrs. Corequisite: FN 520 and admission to the Coordinated Program in Dietetics. Development of skills in interviewing, counseling and basic assessment of nutritional status of healthy individuals.
- 530. Experimental Foods. 3 hrs. Prerequisites: FN 362 and CHE 251, 251L. Study of selected nutritional, chemical, physical, and sensory properties of foods in relation to preparation procedures. Includes laboratory.
- 560. Advanced Nutrition. 3 hrs. Prerequisites: FN 510, CHE 321, and a course in physiology. Biochemical and physiological interactions among vitamins, carbohydrates, proteins, fats and elements in relation to nutritional requirements and utilization.
- 561. Clinical Nutrition. 3 hrs. Prerequisites: FN 362, CHE 321, and a course in physiology. Biochemical and physiological bases of dietary treatment of various disease states.
- 561-L. Clinical Nutrition Laboratory. 2 hrs. Corequisite: FN 561 and admission to the Coordinated Program in Dietetics. Application of dietetics in a hospital setting.
- 562. Food Preservation. 3 hrs. Study of methods and techniques of preserving and storing foods. Convenience foods studies.
- 563. Community Nutrition. 3-6 hrs. Prerequisite: Admission to the coordinated program in Dietetics, or permission of the instructor. Study of nutrition assessment methodology and resources available within the community.

- 564. Clinical Dietetics. 4-15 hrs. Permission of instructor required. Prerequisites: FN 365 and 563. Study of disease states and dietary management in clinical settings.
- 567-L. Practicum in Dietetics. 1-9 hrs. Prerequisite: Permission of the instructor. Application of dietetics in selected health care settings.
- 630. Macronutrients. 2 hrs. Prerequisites: FN 510 and FN 560, or permission of the instructor. Advanced study of digestion, absorption, function, interaction and metabolism of protein, lipids and carbohydrates.
- 631. Micronutrients. 2 hrs. Prerequisites: FN 410/510 and FN 560, or permission of the instructor. Advanced study of vitamin and mineral digestion, absorption, function, interaction and deficiency symptoms.
- 641. Advanced Clinical Nutrition. 3 hrs. Prerequisite: FN 461. A detailed study of the pathophysiology of various disease states as related to nutrition. Emphasis organ systems: cardiovascular, renal, and pulmonary.
- 662. Community Health and Nutrition. 3 hrs. Analysis of current public policy issues related to nutrition, including impact on health, quality of life, and productivity.
- 663. The Nutrition of Children. 3 hrs.
- 664. Seminar in Food and Nutrition. 3 hrs. May be repeated for a total of 6 hours.
- 667. Nutrition for Teachers. 3 hrs.
- 691. Research in Food and Nutrition. 1-16 hrs.
- 692. Special Problems in Nutrition. 1-4 hrs.
- 693. Readings in Food and Nutrition. 1 hr. Recent developments in research related to food and nutrition. May be repeated for a total of 3 hrs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs. maximum. Credit deferred until thesis is completed.

# FOOD SERVICE MANAGEMENT (FSM-827)

- 540. **Food Service Management.** 3 hrs. A study of management of food service systems and the interrelationship of the components of these systems.
- 540-L. Food Service Management Laboratory. 2 hrs. Corequisite: FSM 540.
- 541. Purchasing for the Hospitality Industry. 3 hrs. Procurement of food and non-food materials in hospitality and related industries.
- 542. Food Service Layout and Design. 3 hrs. Planning, designing, and layout of food service facilities with emphasis on arrangement and selection of equipment.
- 570. The School Lunch. 3 hrs. An indepth study of the history, legislation, regulations, philosophy, and need for child nutrition programs.
- 573. Food Systems Management. 4 hrs. Organization and management of food service operations; cost control techniques; and human relations.
- 577. Administrative Dietetics. 3-6 hrs. Prerequisites: FSM 540, 540L, or FSM 573. Study and application of management theory and techniques in the supervision of food service personnel.
- 672. Quantity Food Preparation. 3 hrs. Prerequisite: Permission of instructor.
- 673. School Lunch Supervision. 3 hrs. Management and supervision of multi-units in child nutrition programs.
- 674. Institution Organization and Administration. 3 hrs. Study of individual and group behavior in food service systems.
- 675. **Production Management in Food Service Systems.** 3 hrs. Prerequisite: FSM 674. An indepth exploration of production planning and control techniques including production scheduling, inventory management, and design and layout of food service systems.
- 676. Seminar in Institution Management. 3 hrs. May be repeated for a total of 6 hours.

- 677. Quantitative Assessment of Food Service Systems. 3 hrs. Prerequisite: FSM 674. Development of planning, organizing and controlling guidelines for management of food service systems.
- 692. Special Problems in Institution Administration. 1-4 hrs.
- 693. Readings in Food Service Management. 1 hr. Recent developments in research related to food service management. May be repeated for a total of 3 hrs.
- 694. Current Topics in Food Service Management. 1-3 hrs. Prerequisite: FSM 674 and consent of instructor. Study of a current problem in food service management. May be repeated for credit.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

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- 698. Thesis. 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.

#### **FOREIGN LANGUAGES (FL-228)\***

- 561. Methods of Teaching Foreign and Second Languages. 3 hrs. Prerequisite: Permission of instructor. May be taken for a total of six (6) hours.
- 562. **Translation.** 3 hrs. Prerequisite: Permission of instructor.
- 581. Advanced Credit for Study Abroad. 3-9 hrs. Arr. Prerequisites: Advanced knowledge of the language to be studied; otherwise same as FL 381.
- 663. Applied Linguistics in Second and Foreign Languages. 3 hrs. Prerequisite: Consent of instructor. Study of fundamental aspects of linguistics with an emphasis on application to second and foreign language learning and instruction.
- 664. Second Language Acquisition Theory and Practice. 3 hrs. Prerequisite: Consent of instructor. Study of current theory on second language acquisition with an emphasis on relevance to second or foreign language learning and instruction.
- 665. Sociocultural and Sociolinguistic Perspectives in Language. 3 hrs. Study of the relationship between language and its social context with an emphasis on application to second and foreign language teaching. Prerequisite: Consent of the instructor.
- 690. Foreign Language Teaching Seminar. 1 hr. Ongoing supervision and professional development for TAs and adjuncts in the Department of Foreign Languages and Literatures. May be repeated for a a total of 4 hours.
- 691. **Research.** 1-9 hrs. Credit hours may not count towards a degree in the Department of Foreign Languages and Literatures.
- 692. Special Problems. 1-9 hrs.
- 694. Practicum in Second or Foreign Language. 3 hrs. Prerequisite: Consent of the instructor. Indirect and direct experiences in language teaching. May be repeated once.
- 697. Independent Study. 1-9 hrs.

#### FRENCH (FRE-241)

- 501. French Reading for Research I. 3 hrs. Beginning study of fundamental structures and vocabulary to facilitate reading in French for research. Credit hours may not count towards a degree in the Department of Foreign Languages and Literatures.
- 502. French Reading for Research II. 3 hrs. Prerequisite: FRE 501. A continuation of the study of language structures and vocabulary begun in French 501. Readings from a variety of disciplines will be examined. Credit hours may not count towards a degree in the Department of Foreign Languages and Literatures.
- 505. French Phonology. 3 hrs. An introduction to French phonemics and phonetics with intensive practice in the pronunciation of French.
- 506. Advanced Composition. 3 hrs. Practice in descriptive, narrative, analytical, and research composition, with attention to style, vocabulary, and morphology, as well as methods of organization and presentation.
- 511. Advanced Conversation. 3 hrs. Prerequisite: Advanced knowledge of French. Intensive practice in formal and informal language use on topics drawn from print and electronic media.

- 531, French Film. 1-3 hrs. Prerequisite: Permission of instructor. Study of literary and linguistic aspects of French films.
- 535. Modern France. 3 hrs. Contemporary French education, social attitudes, politics, urban and rural life.
- 536. Francophone Civilization and Culture. 3 hrs. Studies in the history, art, beliefs, behaviors, and values of France and French-speaking cultures. Topics will vary. May be repeated once.
- 542. Survey of Literature I. 3 hrs. French literature from the Middle Ages through the 18th century.
- 543. Survey of Literature II. 3 hrs. French literature from the 18th century through the mid-20th century.
- 545. Twentieth Century French Drama. 3 hrs. A survey of 20th century drama including traditional and avantgarde theatre.
- 546. French Novel and Short Story. 3 hrs. Prose fiction of the 18th and 19th, and 20th centuries, studied in conjunction with films based on the works or thematically related to them.
- 581. Study Abroad. 3-9 hrs. Arr. Prerequisite: Advanced knowledge of the language to be studied; otherwise same as FRE 381.
- 591. Advanced Studies in the French Language. 3 hrs. Permission of the instructor. Content varies in response to students' interests and needs. May be repeated once.
- 605. Old French. 3 hrs. May be taken for a total of six (6) hours.
- 641. French Seminar. 3 hrs. May be taken for a total of nine (9) hours.
- 692. Special Problems in the Teaching of French. 3 hrs. By prior arrangement only. May be repeated once.

#### GERMAN (GER-243)

- 501. German Reading for Research I. 3 hrs. Beginning study of fundamental structures and vocabulary to facilitate reading in German for research. Credit hours may not count towards a degree in the Department of Foreign Languages and Literatures.
- 502. German Reading for Research II. 3 hrs. Prerequisite: GER 501. A continuation of the study of language structures and vocabulary begun in German 501. Readings from a variety of disciplines will be examined. Credit hours may not count towards a degree in the Department of Foreign Languages and Literatures.
- 506. Advanced Grammar. 3 hrs. Advanced study of German grammar; reading and stylistic analysis.
- 645. German Seminar. 3 hrs. May be taken for a total of nine (9) hours.

#### LATIN (LAT-242)

545. Reading in Latin Literature. 3 hrs. Prerequisite: LAT 101 or equivalent. May be taken for a total of nine hours if topic varies.

#### SPANISH (SPA-240)

- 501. Spanish Reading for Research I. 3 hrs. Beginning study of fundamental structures and vocabulary to facilitate reading in Spanish for research. Credit hours may not count towards a degree in the Department of Foreign Languages and Literatures.
- 502. Spanish Reading for Research II. 3 hrs. Prerequisite: SPA 501. A continuation of the study of language structures and vocabulary begun in Spanish 501. Readings from a variety of disciplines will be examined. Credit hours may not count towards a degree in the Department of Foreign Languages and Literatures.
- 505. Advanced Conversation and Phonetics. 3 hrs.
- 506. Advanced Composition and Grammar. 3 hrs. Review of basic grammar, progressing to more sophisticated aspects; idiom study; composition.
- 535. Spanish Culture and Civilization. 3 hrs. A chronological survey of Spanish history and culture from Celt-Iberian times to present.
- 536. Latin American Culture and Civilization. 3 hrs. A chronological survey of Hispanic civilization and institutions.
- 542. **Survey of Peninsular Literature I.** 3 hrs. The literature of Spain from the Medieval period through the Golden Age.
- 543. Survey of Peninsular Literature II. 3 hrs. The literature of Spain in the 19th and 20th centuries.
- 546. Don Quijote. 3 hrs. A study of the Cervantes novel, of its historical and literary background, and of the principal critical materials.

- 552. Survey of Latin American Literature. 3 hrs. The literature of Latin America from the Colonial period through the 19th century.
- 554. Contemporary Latin American Literature. 3 hrs. A survey of fiction, poetry, and drama in the 20th century.
- 581. **Study Abroad.** 3-9 hrs. Prerequisite: Advanced knowledge of the language to be studied; prior arrangements for evaluation and receipt of credit. Credit will be granted for systematic study of the language and culture or the language and literature of a foreign area. Study must be under the direction of a recognized teaching institution approved in advance by the Department of Foreign Languages and Literatures. The department will examine and grade the progress and achievement of the participants in this program before granting credit.
- 591. Advanced Studies in the Spanish Language. 3 hrs. Prerequisite: consent of instructor. Content varies in response to students' interests and needs. Topics include: syntax, lexicography, and etymology. May be repeated once.
- 605. Old Spanish. 3 hrs. May be repeated once.
- 641. Spanish Seminar. 3 hrs. May be repeated twice.
- 692. Special Problems in the Teaching of Spanish. 3 hrs. By prior arrangement only. May be repeated once.

#### TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TSL-229)

- 641. **TESOL Seminar.** 3 hrs. May be repeated twice.
- 692. Special Problems in TESOL. 3 hrs. By prior arrangement only. May be repeated once.

#### **FORENSIC SCIENCE (FSC-375)**

- 530. **Survey of Forensic Toxicology.** 3 hrs. The isolation and identification of drugs and poisons from a biological matrix.
- 540. **Drug Identification.** 3 hrs. Lectures, demonstrations, and discussions covering all aspects of drug identification, particularly related to law enforcement.
- 542. Arson and Explosives. 3 hrs. Introduction to the investigation of arson and bombings.
- 542-L. Arson and Explosives Laboratory. 1 hr.
- 591. Special Projects in Forensic Science. 2 hrs. Individual studies in forensic science principles.
- 591-L. Laboratory for Forensic Science 591. 2 hrs. Hands-on experience with true forensic science situations.
- 691. Research. 1-16 hrs.

# **GENERAL STUDIES (GS-010)**

500. Orientation to Instructional Settings. 1 hr.

# **GEOGRAPHY AND AREA DEVELOPMENT (GHY-268)**

- 500. Geography of Mississippi. 3 hrs. Survey of physical, economic and historical geography of state; emphasis on man-environment relations and problems.
- 501. **Geography of the United States and Canada.** 3 hrs. A geographical analysis of the physical and human characteristics of the region.
- 502. Geography of Middle America and the Caribbean. 3 hrs. A geographical analysis of the physical and human characteristics of the region.
- 503. Geography of South America. 3 hrs. A geographical analysis of the physical and human characteristics of the region.
- 504. **Geography of Europe.** 3 hrs. A geographical analysis of the physical and human characteristics of the region.
- 505. Geography of Russia. 3 hrs. A geographical analysis of the physical and human characteristics of the region.
- 506. **Geography of Africa.** 3 hrs. A geographical analysis of the physical and human characteristics of the region.
- 507. **Geography of East and South Asia.** 3 hrs. A geographical analysis of the physical and human characteristics of the region.

- 508. Geography of Southwest Asia, 3 hrs. A geographical analysis of the physical and human characteristics of the region.
- 510. Advanced Cartography. 2 hrs. Prerequisite: GHY 310. Corequisite: GHY 510-L. Map projections, geodesy, quantitative symbolization, color separation, reproduction.
- 510-L. Advanced Cartography Laboratory. 2 hrs. Corequisite: GHY 510. Advanced map design, scribing, and reproduction laboratory.
- 512. Remote Sensing of the Environment. 2 hrs. Prerequisite: GHY 311 or permission of instructor. Theory of acquisition processing and analysis of remotely sensed data and images and survey of environmental applications of remote sensing.
- 512-L. Remote Sensing Laboratory. 1 hr. Corequisite: GHY 512. Processing and analysis of data and images collected by remote sensing methods.
- 513. **Field Methods**, 3 hrs. Basic methods used to classify, analyze, and report field-gathered data in geography and planning.
- 516. Computer Application in Geography. 2 hrs. Prerequisite: Experience using nonprocedural computer languages. Corequisite: GHY 516-L. Concepts and applications of computerized geographic mapping, information, simulation, and analytic systems.
- 516-L. Computer Applications in Geography Laboratory. 1 hr. Corequisite: GHY 516. Operation of computerized geographic mapping information, simulation, and analytic systems. Uses nonprocedural languages.
- 517. Geographic Information System Design. 2 hrs. Prerequisite: FORTRAN or Pascal. Theory, design, and application of geographic data handling and analysis systems.
- 517-L. Geographic Information System Design Laboratory. 2 hrs. Pre- or Co-requisite: PHY 517. Design and programming of geographic data handling and analysis systems using ARC/INFO.
- 518. **Geographic Information Management.** 2 hrs. Prerequisite: GHY 517. Implementation and management of GIS in public sector organizations and use of GIS in decision-making.
- 518-L. Geographic Information Management Laboratory. 1 hr. Corequisite: GHY 518. Construction and use of a GIS data base in response to decision-making needs.
- 525. Applied Climatology. 3 hrs. An introduction to the application of climate elements to various forms of man's economic and social activities.
- 527. Meteorology, 3 hrs. Study of temporal and areal variations in composition, structure, and workings of the atmosphere. Practice in use of instruments and measurements.
- 528. Severe Storms. 3 hrs. An examination of the causes, characteristics and destructive nature of severe weather.
- 535. Historical Geography of the American Landscape. 3 hrs. Evolution of cultural landscapes of the area now comprising the United States; emphasis on processes of change.
- 540. **Population and Human Resources.** 3 hrs. A geographical analysis of the biological and cultural characteristics of population.
- 551. Theories of Economic Location. 3 hrs. Principles of industrial location analysis; emphasis on theory, locational decision making, and regional location of manufacturing.
- 573. Water Resources. 3 hrs. Study of hydrologic processes and their application to needs of cities, industry, agriculture, and recreation.
- 574. Watershed Management. 3 hrs. Investigation of watersheds as planning and management units; emphasis on relationship of water to other resources. Game theory used.
- 589. Caribbean Studies. 3 hrs. Variable content. Lecture series, field exercises, and research offered abroad under the auspices of the Center for International Education.
- 599. British Studies: Geography of the British Isles. 3-6 hrs. An overview of the human and physical geography of the British Isles. Includes field trips and directed research.
- 610. Seminar in Research Techniques and Presentation of Geographic Data. 1-3 hrs. Required of all geography graduate students.
- 612. Seminar in Cartography. 3 hrs. May be repeated up to six (6) hours with change in content to include cartographic, aerial photo interpretation, remote sensing, statistical, and geographic information systems.

- 615. Quantitative Methods in Spatial Analysis. 3 hrs. An advanced course in statistical and other quantitative techniques applied to problems of spatial analysis.
- 617. **Geography for Teachers**. 3 hrs. Current theories, practices, and techniques used in teaching geography at the elementary and secondary levels.
- 623. Seminar in Environmental Climatology. 3 hrs. May be repeated up to six (6) hours with change in content.
- 631. Seminar in Cultural-Historical Geography. 3 hrs.
- 650. Seminar in Economics Geography. 3 hrs. May be repeated up to six (6) hours with change in content.
- 673. Seminar in Water Resources. 3 hrs. May be repeated to six (6) hrs. with change in content.
- 680. Seminar in History and Development of Geographic Thought. 3 hrs.
- 691. Internship. 1-16 hrs. May be repeated for a total of nine.
- 692. Special Problems. 1-6 hrs.
- 693. Internship in Cartography. 1-9 hrs. Prerequisite: Permission of instructor.
- 694. **Prolaboratory in Cartography.** 1-3 hrs. Prerequisite: Permission of instructor. Preparation and presentation of a professional cartographic or remote sensing project. May be repeated with change of content for a total of six (6) hours of credit.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

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- 698. Thesis. 1-6 hrs. for a total of 6 hrs.

# **GEOLOGY (GLY-340)**

- 501. **Principles of Stratigraphy**. 3 hrs. Prerequisites: GLY 304, 308, 341, or permission of instructor. A study of the character and distribution of sedimentary rock units in space and time.
- 503. **Optical Mineralogy.** 3 hrs. Pre- or Corequisite: GLY 304. Introduction to optical mineralogy, and thin section study of rocks using polarizing microscope.
- +503-L. Optical Mineralogy Laboratory. 1 hr. Must be taken concurrently with GLY 503.
- 505. **Sedimentology.** 3 hrs. Prerequisite: GLY 304. Study of the character of sediments and sedimentary structures in the context of depositional environments.
- +505-L. Sedimentology Laboratory. 1 hr. Must be taken concurrently with GLY 505.
- 506. Fundamentals of Crystallography. 1 hr. Prerequisite: MAT 103. An introduction to the concepts of crystal systems, morphology, Herman-Mauguin symbols, Braviais lattice, unit cells. Miller indices, and X-ray diffraction.
- +506-L. Fundamentals of Crystallography Laboratory. 1 hr. Corequisite: GLY 506.
- 507. **Principles of X-ray Diffraction.** 1 hr. Prerequisite: GLY 301 or permission of instructor. Introduction to principles, analytical techniques, and precautions involved in X-ray diffraction instrumentation.
- +507-L. Principles of X-ray Diffraction Laboratory. Corequisite: GLY 507.
- 510. Elements of Geochemistry. 3 hrs. Prerequisite: GLY 304. Chemical principles governing the formation of minerals and rocks and their reactions with the lithosphere, hydrosphere, atmosphere, and biosphere.
- 511. **Applied Groundwater Geochemistry.** 3 hrs. Prerequisites: GLY 410/510, GLY 476/576 recommended. Design and implementation of groundwater geochemistry monitoring programs for hydrogeological site assessment.
- 520. **Applied Geophysics I.** 2 hrs. Prerequisites: GLY 308, MAT 168, PHY 106 or consent of instructor. Introduction to seismic methods used in hydrocarbon and mineral exploration.
- +520-L. Applied Geophysics I Laboratory. 1 hr. Corequisite: GLY 520. Introductory exercises in seismic computation and interpretation.
- +521. **Applied Geophysics II.** 2 hrs. Introduction to gravity, magnetic and electrical methods used in hydrocarbon and mineral exploration.

- +521-L. Applied Geophysics II Laboratory. 1 hr. Corequisite: GLY 521. Introductory exercises in computation and interpretation of gravity, magnetic and electrical fields.
- 522. Geophysical Well-Logging. 2 hrs. Prerequisites: GLY 101, MAT 103, PHY 106. Pre- or Corequisite: GLY 505. Principles of obtaining data from bore hole instruments, and geological interpretation of data.
- +522-L. Geophysical Well-Logging Laboratory. 1 hr. Must be taken concurrently with GLY 522.
- 530. Principles of Geology for Science Teachers. 3 hrs. Prerequisite: Bachelor's degree in education or equivalent. Principles of physical and historical geology for teachers. Not applicable to geology degree.
- 531. Coastal Marine Geology. 3 hrs. Gulf Coast Research Laboratory. Prerequisites: 12 credit hrs. in geology. A study of inshore and nearshore geological processes, sedimentation patterns and landform development. May be taken as MAR 582.
- 543. Calcareous Micropaleontology. 3 hrs. Prerequisite: GLY 341. Taxonomy, morphology, and stratigraphic use of calcareous microfossils.
- +543-L. Calcareous Micropaleontology Laboratory. 1 hr. Must be taken concurrently with GLY 543.
- 544. Siliceous Micropaleontology. 3 hrs. Prerequisite: GLY 341. Taxonomy, morphology, and stratigraphic use of siliceous and organic-walled microfossils.
- +544-L. Siliceous Micropaleontology Laboratory. 1 hr. Must be taken concurrently with GLY 544.
- 550. Geological Marine Science. 3 hrs. Pre- or Corequisite: GLY 505 or permission of instructor. Study of the formation and deformation of the oceanic crust and the distribution and character of marine sediments.
- +550-L. Geological Marine Science Laboratory. 1 hr. Pre- or Corequisite: GLY 550. Examination and interpretation of marine geological samples and data.
- 565. Engineering Geology. 3 hrs. Prerequisite: GLY 308 or permission of instructor. The integration of geologic and engineering principles and their application in the evaluation and utilization of Earth resources and the mitigation of natural and human-induced hazards.
- 570. **Petroleum Geology**. 3 hrs. Pre- or Corequisite: GLY 401, or permission of instructor. The origin, occurrence, and accumulation of oil and natural gas.
- 574. **Geological Excursion**. 1-4 hrs. Field studies of geological phenomena in areas remote from the campus, by means of 8-10 day field trips.
- 576. **Hydrology.** 3 hrs. Pre- or Corequisite: GLY 401, or permission of instructor. An introduction to the origin, distribution, movement, and properties of the waters of the earth.
- 587. Industrial Rocks and Minerals. 3 hrs. Prerequisite: Permission of instructor. Nature and formation of industrial rock and mineral deposits.
- 600. **Paleoclimatology.** 3 hrs. Prerequisite: Permission of instructor. Past climatic conditions based on the rock, mineral, and biologic record.
- 601. **Pleistocene Geology.** 3 hrs. Prerequisite: Permission of instructor. Earth history of the Pleistocene epoch, with emphasis on glacial phenomena.
- 602. **Hypotheses of Continental Drift.** 3 hrs. Prerequisite: Permission of instructor. Study of evidence and hypotheses regarding crustal dislocations.
- 603. **Sedimentary Environments.** 3 hrs. Prerequisite: Permission of instructor. Comparison of modern environments of sedimentation with the evidence regarding paleoenvironments.
- 604. Tectonics, 3 hrs. Prerequisite: Permission of instructor. Investigation of large-scale crustal deformation.
- 605. Petrology of Igneous Rocks. 3 hrs. Prerequisite: GLY 403/503; and GLY 410/510 recommended. Origin, classification, composition, and geochemistry of igneous rocks.
- +605-L. Igneous Petrology Laboratory. 1 hr. Must be taken concurrently with GLY 605.
- 607. Sedimentary Petrology. 3 hrs. Prerequisites: GLY 403/503, 405/505, and permission of instructor. Origin, classification, composition and geochemistry of sedimentary rocks.
- +607-L. Sedimentary Petrology Laboratory. 1 hr. Must be taken concurrently with GLY 607.
- 608. Gulf Coast Geology. 3 hrs. Prerequisite: Permission of instructor. Stratigraphy, structural geology, and mineral resources of the Gulf Coastal Province of the U.S.
- 612. Isotope Geology. 3 hrs. Prerequisite: Permission of instructor. Theory and application of geochronology and the use of isotopes as tracers of geological processes.

- 615. Clay Mineralogy. 3 hrs. Prerequisite: Permission of instructor. origin, structure, and chemistry of clays, identification techniques, clay-water systems, soil formation and engineering applications.
- +615-L. Clay Mineralogy Laboratory. 1 hr. Corequisite: GLY 615. Laboratory techniques for the identification of clay minerals.
- 641. **Paleoecology.** 3 hrs. Prerequisites: GLY 341 or equivalent. A study of the relationship between ancient organisms and the environment in which they lived; field trips.
- 677. Advanced Groundwater Hydrology. 3 hrs. Prerequisite: GLY 476/576 or permission. The advanced study of groundwater flow and seepage, well hydraulics, water quality, groundwater management, modeling techniques, and exploration methods pertaining to water resource investigations.
- 686. Marine Mineral Deposits. 3 hrs. Prerequisite: Permission of instructor. Genesis and mode of occurrence of continental shelf and deepsea mineral deposits.
- 689. Seminar. 1 hr. Prerequisite: Permission of instructor. May be repeated once for a total of two hours credit.
- 691. Research in Geology. 1-16 hrs. Prerequisite: Approval of major instructor.
- 692. Special Problems in Geology I, II, III. 1-3 hrs. Investigation of a specific problem not related to thesis research.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

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- 698. Thesis. 1-6 hrs. for a total of 6 hrs.

### **HISTORY (HIS-272)**

- 501. Intellectual and Cultural History of the United States. 3 hrs. A survey of philosophy, social thought and cultural developments from the 17th century to the present.
- 503. **Modern China.** Survey of the historical processes that have transformed China into a modern Marxist society.
- 505. **Modern Japan.** Analyzes the reasons why Japanese society has successfully adapted to and adopted cultural, economic, and political systems of the modern West.
- 506. **History of the German Lands Since 1815.** 3 hrs. This course covers the broad lines of political and social development in the German-speaking regions from the early 19th century to reunification in 1990.
- 508. Renaissance Europe 1348-1500. 3 hrs. This course will examine the social, political, and intellectual changes emerging in Europe after the Black Death.
- 509. Themes in the Non-Western World. 3 hrs. An analysis of economic, political, social, and cultural issues which have shaped relations between the Western and non-Western worlds.
- 510. **Themes in World History I, II, III.** 3-9 hrs. Course designed for elementary and secondary school teachers to enhance their world history teaching skills.
- 512. English Constitutional History. 3 hrs. Emphasis on the main trends in the evolution of the modern common law system and the contemporary constitution.
- 513. Medieval Life and Thought. 3 hrs.
- 514. Nazi Germany. 3 hrs. A study of the political, diplomatic, economic, and social developments in Germany from 1919 through 1945.
- 515. French Revolution and Napoleon. 3 hrs. A study of Revolutionary and Napoleonic France and its impact on Europe.
- 516. Europe 1815-1870. 3 hrs. A survey of early nineteenth century Europe, with emphasis on nationalism and the quest for reform.
- 517. Europe 1870-1914. 3 hrs. A survey of late nineteenth and early twentieth century Europe with emphasis on the growth of democracy, the expansion of empires, and the origins of World War I.
- 518. Europe 1914-1939. 3 hrs.

- 519. Europe Since 1945, 3 hrs. A survey of European history since the end of World War II, covering such key developments as economic reconstruction, the Cold War, NATO, and the Common Market.
- 520. France, 1815-Present. 3 hrs. A survey of French history after Napoleon emphasizing the evolution of political and social structures.
- 521. Tudor-Stuart Britain. 3 hrs.
- 522. **Reformation Europe 1500-1650.** 3 hrs. This course will examine the setting, events, and implications of the religious Reformation in European history.
- 523. Science and Society: From Copernicus to the Bomb. 3 hrs. An interdisciplinary course designed for both science and liberal arts students. Traces the development of science and technology and their role in society from the Renaissance to the present. (Cross-listed under BSC 523 and PHY 585.)
- 524. Intellectual and Cultural History of Modern Europe. 3 hrs. Philosophy, social thought, and the arts from the Enlightenment to the present.
- 526. **Topics in British Commonwealth History.** 3 hrs. The British Commonwealth from its mid-nineteenth century origins to the present. Will focus on Canada and various other Commonwealth nations.
- 527. Family and Society in Medieval and Early Modern Europe. 3 hrs. This course will sutdy continuity and change in the family from c. 1150-1650. Some topics considered will be the structure of the family, the role of women, misogyny, and sexuality.
- 528. United States Relations with East Asia. Attempts to explain the dynamic interactions between the United States and China and Japan over the past 200 years.
- 529. Eastern Europe in the 20th Century. 3 hrs. This course introduces students to the diversity of social, political, and cultural experience in the regions of East-Central Europe.
- 531. **History of Socialism in the West.** 3 hrs. This course explores in some detail the historical evolution and meaning of socialism as a theoretical idea and a grass roots social and political movement.
- 532. Studies in European History. 3 hrs. May be repeated for a total of 9 hrs.
- 533. The Age of the Enlightenment. 3 hrs. A survey of the political, social, and cultural history of Europe from the Age of Absolutism to the French Revolution.
- 534. **History of Nationalism: Theories and Movements.** 3 hrs. This course is intended to give students a closer awareness and understanding of nationalism in the history of the 19th and 20th centuries.
- 535. **Social History of Victorian Britain.** 3 hrs. This course explores the changing social conditions during the 70-year period of the Victorian era, including Victorian values, the position of women and children, popular protest and trade unionism.
- 536. **Topics in Early Modern European History.** 3 hrs. This course will examine various topics in late medieval and early modern European history.
- 540. Age of Jefferson and Jackson. 3 hrs. A study of political, social, and cultural changes in the United States from 1789 to 1848.
- 542. **The Old South.** 3 hrs. The social, economic, and cultural history of the antebellum South with particular emphasis on the plantation system and slavery.
- 543. The New South. 3 hrs. An analysis of the peculiarities of the South's social, economic, political, and intellectual development from 1877 to the present. Emphasis is placed on those factors making the South distinctive in American history.
- 544. Women in American Society. 3 hrs. A survey of the experience of American women from the colonial period to the present with emphasis on the evolution of woman's role in society in response to changing economic and social conditions.
- 546. U.S. Foreign Relations. 3 hrs. A history of U.S. foreign relations with particular emphasis on Manifest Destiny, the New Imperialism, World War I, the events leading to World War II, World War II, and the Cold War.
- 547. Colonial America. 3 hrs. Development of social, political, economic, and religious life in the English colonies of North America to 1763.
- 548. The American Revolution. 3 hrs. A discussion course concerning the dispute between Great Britain and its American colonies which led to the development of a new nation.
- 550. The Southern Frontier. 3 hrs. A discussion course concerning pioneer life—primarily in the South—from the Atlantic seaboard to the Mississippi Valley.

- 551. The Western Frontier. 3 hrs. Examines the significance of frontier types west of the Mississippi including explorers, mountain men, cowboys, farmers, miners, railroaders, and Indians.
- 552. The Sectional Controversy and the Civil War, 1848-1877. 3 hrs. An examination of sectional conflict, Civil War, and Reconstruction with primary emphasis on political and military history.
- 553. The Origins of Modern America, 1877-1919. 3 hrs. A survey of political, economic, diplomatic, and social developments in the United States from the close of the Civil War through the end of World War I.
- 554. Twentieth Century America, 1919-1945. 3 hrs. A detailed examination of the social, intellectual, political, and economic history of the interwar years.
- 558. Our Times. 3 hrs. A detailed examination of social, intellectual, political, diplomatic, and economic history since World War II.
- 560. Studies in Civil Rights. 3 hrs. Prerequisite HIS 340 or permission of instructor. Intensive study (readings, discussion, research) of Twentieth Century African-American protest leadership and the freedom struggle.
- 580. History of Mexico and the Caribbean. 3 hrs.
- 583. Studies in South American History. 3 hrs. May be repeated for a total of six hours.
- 589. Austrian Studies. 3-6 hrs. Variable topics in central European history. Offered abroad under auspices of Center for International Education. No more than 3 hours to be counted as credit toward degree.
- 599. **British Studies: Seminar in European Studies.** 3-6 hrs. Lecture series and research in European studies offered abroad under auspices of Institute of Anglo-American Studies. No more than 3 hours to be counted as credit toward degree.
- 692. Special Problems, I, II, III, IV. 1-4 hrs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in at least 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 3 or 6 hrs. for a total of 6 hrs:
- 710. Philosophy and Methods of History. 3 hrs. Acquaints graduate students with the nature and methods of historical study. Topics include research and bibliographic techniques; topic selection and questionframing; data collection, analysis, and interpretation, including quantification.
- 712. Research Seminar in European History. 3 hrs. May be repeated for a total of nine hours.
- 716. Seminar in British History. 3 hrs. May be repeated for a total of nine hours.
- 717. Seminar in Central European History. 3 hrs. May be repeated for a total of nine hours.
- 718. Seminar in Western European History. 3 hrs. May be repeated for a total of nine hours.
- 740. Interpretations in American Historiography. 3 hrs.
- 742. Seminar in Modern European Historiography. 3 hrs. A course in historiography that will acquaint graduate students with influential historians and their conflicting interpretations of major historical issues.
- 744. Seminar in African-American History. 3-6 hrs. as topics vary. Examination of selected topics in black history.
- 746. Seminar in U.S. History to 1877. 3 hrs. May be repeated for a total of nine hours.
- 747. Seminar in U.S. History Since 1877. 3 hrs. May be repeated for a total of nine hours.
- 748. Seminar in Mississippi History. 3 hrs.
- 749. Research Seminar in American History. 3 hrs. May be repeated for a total of nine hours.
- 750. Inter-University Consortium Seminar. 3 hrs. May be repeated for a total of nine hours. Variable topics in United States and Modern European history offered in conjunction with the History faculty of Mississippi State University.
- 780. Seminar in Latin American History. 3 hrs. May be repeated for a total of nine hours.
- 791. Research in History. 1-16 hrs. Prerequisite: Approval of major professor.

- 796. Practicum in the Teaching of History in Colleges and Universities. 3 hrs. May be repeated for a total of nine (9) hours.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in at least 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 799. British Studies: Advanced Seminar in European Studies. 3-6 hrs. Lecture series and research in European studies offered abroad under auspices of Institute of Anglo-American Studies. No more than 3 hours to be counted as credit toward degree.
- 898. Dissertation. 1-12 hrs. for a total of 12 hours.

# **HOME ECONOMICS EDUCATION (HEE-820)**

- 501. Family Life Education. 3 hrs. General philosophy and broad principles of family life education with emphasis on planning, implementing and evaluating such educational programs.
- 504. Consumer Economics. 3 hrs. Study of how consumers, business, and government interact in the exchange of goods and services in the marketplace.
- 509. Occupational Home Economics. 3 hrs. Developing and evaluating teaching units for home economics-related occupational programs.
- 605. Supervision of Home Economics Education. 3 hrs. Practices and procedures in the supervision of vocational home economics.
- 606. Selected Topics in Home Economics Education. 3 hrs. (May be repeated once.) Prerequisite: The corresponding subject matter course. The development and application of units of work in selected areas in the secondary school program.
- 607. Curriculum Problems in Home Economics. 3 hrs. A practicum for developing home economic curriculum materials for local schools.
- 610. Seminar in Home Economics Education. 1-6 hrs. Current trends and issues in home economics.
- 611. Evaluation in Home Economics. 3 hrs. Theory and practice of systematic evaluation of components of home economics programs, including occupational home economics.
- 612. Field Experience in Home Economics Related Occupations. 6 hrs. Supervised work experience in approved Home Economics Occupations. Can only be counted toward Occupational Certification and/or the Education Specialist degree.
- 615. Methods, Materials, and Information Technology in Home Economics. 3 hrs. Emphasis on new developments in teaching home economics, including computer technology.
- 691. Research, 1-4 hrs.
- 692. Special Problems in Home Economics Education. 1-4 hrs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

  Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.
- 798. **Research Problem.** 6 hrs. Selection of a practical educational problem using research and professional knowledge. A scholarly paper is required.

# HOTEL, RESTAURANT AND TOURISM MANAGEMENT (HRT-818)

- 545. Hospitality Financial Management. 3 hrs. Prerequisite: HRT 380. Study of financial statement analysis, capital expenditures and franchising in the hospitality industry.
- 582. Marketing of Hospitality and Travel Services. 3 hrs. Prerequisite: MKT 300. Analysis of the planning, developing, and marketing of food, lodging, and travel services.
- 583. **Dimensions of Tourism.** 3 hrs. Study of the components and forces which influence the international and domestic hospitality and travel industries.

- 590. International Studies in Hotel, Restaurant and Tourism Management. 3-6 hrs. Arr. Examination of hospitality, tourism, and food service industry via international lectures and field trips.
- 594. Tourism Destination Development. 3 hrs. Prerequisite: HRA 583 or permission of instructor. Study of community impact—positive adverse-of different tourism enterprises. Special emphasis on festivals and community events.
- 692. Special Problems in Hotel, Restaurant, and Tourism Management. 1-3 hrs.
- 693. **Readings in Hotel, Restaurant, and Tourism Management.** 1 hr. Recent developments in research related to the hospitality industry. May be repeated for a total of 3 hrs.

# HUMAN PERFORMANCE AND RECREATION (HPR - 705)

- 501. Corrective and Adaptive Physical Education. 3 hrs. Recognition of and corrective exercises for functional abnormalities. Adapted techniques in instructional settings.
- 504. Motor Development. 3 hrs. A study of the motor aspects of human growth and development process.
- 509. Psychological and Sociological Aspects of Motor Performance. 3 hrs. The analysis and study of human behavior patterns as they relate to sport-related performance.
- 511. Adapted Activities and Techniques in Therapeutic Recreation. 3 hrs. Techniques of adapting recreational activities, equipment, and facilities for persons with disabilities.
- 513. **Organization and Administration of Recreation.** 3 hrs. Designed to study the organization and administration of recreation agencies and their policies.
- 515. Business Procedures for Parks and Recreation. 3 hrs. A study of specific business procedures and administrative policies.
- 517. Legal Aspects of Recreation and Leisure Services. 3 hrs. Legal issues related to leisure service management including legal foundations, legal liability, land use policy, employment regulations, disabled services, and current issues.
- 524. Community Recreational Resource Services and Organizations. 3 hrs. A study of the varied agencies which provide community recreation services and the operation of specialized recreation facilities.
- 533. Advanced Management in Recreation. 3 hrs. A study of advanced policy and procedures in recreation programs and services.
- 534. Facility Design and Maintenance. 3 hrs. The principles and applications of design and maintenance concepts as they apply to indoor and outdoor sport and recreation facilities.
- 536. Park and Recreation Planning. 3 hrs. Fundamental principles and methodologies dealing with proper identification, allocation, and use of recreational resources.
- 543. **Outdoor Education.** 3 hrs. A study of outdoor education, specifically its philosophy, programs, methods, and resources. Organization, programming, and conducting programs and activities in educational settings.
- 544. Operational Administration of Commercial Recreation. 3\_hrs. Emphasizes appropriate management skills which are essential to the successful operation of a commercial recreational enterprise.
- 547. **Interpretation of Cultural and Natural Resources.** 3 hrs. The interpretive process as applied to natural and cultural resources.
- 550. Procedures in Therapeutic Recreation. 3 hrs. The history, theory, and process of leisure education for special populations.
- 551. Therapeutic Recreation Programming. 3 hrs. The organization, programming, conducting recreational programs and activities in institutions.
- 552. **Gerontology and Therapeutic Recreation**. 3 hrs. An overview of the bio-psycho-social aspects of aging and the provision of recreation services for therapeutic recreation.
- 553. Administration in Therapeutic Recreation. 3 hrs. Administration of activity therapy services in clinical and community based settings.
- 564. **Issues in Commercial Recreation.** 3 hrs. Insight into issues that cause problems and lead to trends for the commercial recreation service industry.
- 570. **Development of Strength and Conditioning Programs.** 3 hrs. The development and administration of strength, endurance, flexibility, speed, and agility programs.

- 575. Medical Aspects of Athletic Training. 3 hrs. Prerequisite: Instructor permission. Team physician and trainer relationships. Physical examination, emergency equipment, medical terminology, and problems related to the team doctor.
- 577. **Seminar in Sports Medicine**. 1-3 hrs. Prerequisite: HPR 575. A study of modern techniques used in sports medicine relevant to coaches, trainers, and team physicians.
- 578. Specialized Studies in Developmental Disabilities. 1-6 hrs. Specialized study and skill acquisition in the area of developmental disabilities. Topics vary.
- 580. **Introduction to Driver Education.** 3 hrs. Critical analysis of traffic accidents, attitudes, factors, essential knowledge of automobile operation, and traffic laws.
- 581. **Traffic Safety Education.** 3 hrs. An indepth study of major traffic safety problems, including driver, pedestrian, engineering, and enforcement.
- 582. Laboratory Programs in Driver Education. 3 hrs. An examination of aims, objectives, and role of laboratory programs in driver education.
- 583. Methods of Driver and Traffic Safety Education. 3 hrs. Prerequisite: HPR 580. Concurrent enrollment in HPR 583L. Methods of teaching in driver education programs.
- 583-L. Driver Education Laboratory. 1 hr. Concurrent enrollment in HPR 583. This course is designed to provide students with supervised practical experience in using instructional tools of Driver Education.
- 584. Simulation in Driver Education. 3 hrs. Prerequisites: HPR 580 and 583. Analysis of audiovisual instructional techniques used in Driver Education.
- 586. Innovative Programs in Driver Education. 3 hrs. New and unique teaching methods of driver and traffic safety education.
- 588. **Motorcycle Safety Education.** 3 hrs. Analysis of motorcycle traffic problems; methods of teaching classroom and laboratory phases of motorcycle education.
- 589. **Driver Education for Special Students.** 3 hrs. Curriculum development and teaching materials in traffic safety education for special education students.
- 593. Exercise Specialist. 3 hrs. Cognitive and practical learning experience in GXT, interpretation, prescriptions, and supervision of exercise programs.
- 597. **Professional Collaboration for Developmental Disability Services.** 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.
- 598. Families of Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.
- 599. **British Studies.** 3-6 hrs. Involves variable topics. Lectures and supervised research in England. Offered exclusively through the USM Institute of Anglo-American Studies.
- 601. Exercise Physiology, 3 hrs. The study of the physiological bases of muscular activity with special attention to general effects on body functions.
- 602. **Graded Exercise Testing**. 3 hrs. Study and application of graded exercise testing safely and reproductively so as to obtain valid and reliable data.
- 605. **Policy and Governance in Sport.** 3 hrs. The study of governing agency policy formation processes and administrative implementation.
- 670. Administration of Athletics and Sports. 3 hrs. Special emphasis on problems of the athletic director and coach in organizing and directing the athletic programs.
- 676. **Athletic Seminar.** 3 hrs. An indepth study and analysis of the athletic profession as it relates to advanced skills and knowledge of coaching.
- 677. **Sport Law.** 3 hrs. Legal concepts and issues impacting sport administration and coaching policy formation and practice.
- 678. Assessment and Intervention for Handicapped Children 0-5. 3 hrs. Current issues and theories regarding assessment and intervention procedures for at-risk and handicapped young children, birth through 5.
- 679. Care and Treatment of Athletic Injuries. 3 hrs. Techniques and facilities for adequate prevention and treatment of athletic injuries.
- 680. Research Techniques. 3 hrs. Prerequisite: Graduate level statistics course or permission of the instructor. Introduction to methods and design problems specific to research in human performance and recreation. Designed to promote an understanding of the theory, tools, and processes involved in designing human performance and recreation research studies.

- 688. Medical Aspects of Developmental Disabilities. 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.
- 691. **Research**. 1-16 hrs. Prerequisite: Permission of School Director required. Topics and procedures must be approved by graduate advisory committee. For master's level graduate students only.
- 694. **Field Problems.** 1-6 hrs. Prerequisite: Permission of instructor. Readings and guided experience dealing with problem situations in the field and related institutional settings.
- 696. **Practicum.** 1-6 hrs. Prerequisite: Permission of instructor. Designed to provide master's level students opportunities for practical application of relevant theories in professional field settings.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in at least 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. For a total of 6 hrs. Credit deferred until thesis completed.
- 701. Advanced Exercise Physiology I. 3 hrs. Concurrent enrollment in HPR 701-L required. Circulatory, respiratory, nervous, and muscular system during and after physical activity.
- 701-L. Advanced Exercise Physiology I Laboratory. 2 hrs. Co-requisite: HPR 701. Use and care of physiology laboratory equipment.
- 703. Advanced Kinesiology. 3 hrs. Prerequisite: Undergraduate anatomy and physiology or permission of instructor. The application of anatomical and physiological principles of kinesiology to physical activity.
- 704. **Tests and Measurement in Human Performance.** 3 hrs. Tests of fitness, skills, and abilities. Administration and interpretation.
- 705. Motor Learning. 3 hrs. Physical and psychological variables essential to the acquisition of motor skills.
- 706. Cardiovascular Physiology. 3 hrs. Physiology of the heart with emphasis on normal versus abnormal conditions affecting human performance.
- 707. Physiological Response of Women to Physical Training. 3 hrs. Study of women's physiological abilities, susceptibility to injuries, gynecological problems and psychological aspects of coping with physical training.
- 708. **Pediatric Exercise Physiology.** 3 hrs. The study of the effects of exercise and training in children with particular attention to physiological changes which occur prior to and during puberty.
- 710. **Problems and Emerging Trends in Recreation.** 3 hrs. Problems and emerging trends related to recreation with emphasis on problem solving and evaluation.
- 711. **Research and Evaluation in Recreation and Leisure.** 3 hrs. Designed to develop knowledge and understanding relative to research methods most utilized in recreation.
- 712. Philosophical Foundations in Recreation. 3 hrs. Prevailing concepts, theories, and professional philosophies affecting recreation.
- 713. **Special Field Studies in Recreation.** 3 hrs. Encompasses the application of various theories to realistic field situations and pertinent areas of concern.
- 720. **Administration of Human Performance Programs.** 3 hrs. Personnel management, budgetary concerns, facilities management, program supervision, and other problems faced by administrators.
- 722. Administration of Intramural and Extramural Activities. 3 hrs. Planning and implementation of secondary and collegiate level recreational sport programs.
- 723. Advanced Methods of Teaching Physical Education. 3 hrs. Teaching functions in the physical education contextual framework. Styles of teaching, reflective experience, and systematic observation techniques introduced.
- 730. Cardiac Rehabilitation. 3 hrs. Attention is given to components of myocardial infarction and cardiac rehabilitation programs.
- 742. **Program Design in Human Performance.** 3 hrs. Fundamental principles and bases of curriculum construction for educational programs in school and non-school instructional settings.
- 744. Foundations and Trends in Human Performance and Recreation. 3 hrs. Historical trends and current issues surrounding the development of the sub-disciplines within human performance and emerging professions.

- 745. Analysis of Teaching and Supervision in Physical Education. 3 hrs. Prerequisite: HPR 723 or instructor approval. Issues and techniques in supervision of teaching in physical education. Advanced methods in analysis of teacher/student behavior and content development.
- 780. **Graduate Seminar**. 1 hr. May be repeated for a total of 2 hours. Current trends and issues in human performance.
- 790. Seminar in Recreation. 3 hrs. A seminar course pertaining to selected current professional topics in all areas of recreational study.
- 791. Research. 1-16 hrs. Prerequisite: Permission of Department Head. Topics and procedures must be approved by graduate advisory committee. For doctoral students only.
- 792. Special Problems. 3 hrs.
- 796. **Practicum.** 2-6 hrs. Prerequisite: Permission of instructor. Designed to provide doctoral students with opportunities for practical applications of relevant theories in professional field settings.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 801. **Physiology of Aging.** 3 hrs. The study of the physiological basis of human aging through examination of organ systems and the impact of physical activity on the aging process.
- 805. Advanced Exercise Physiology II. 3 hrs. Prerequisite: HPR 701. Emphasis on systems of energy delivery and utilization, enhancement of energy capacity, and work performance. Concurrent enrollment in HPR 805L required.
- 805-L. Advanced Exercise Physiology II Laboratory. 2 hrs. Prerequisite: HPR 701. Co-requisite: HPR 805. Application of advanced laboratory in techniques in the study of human performance.
- 807. Functional Evaluation and Exercise Testing. 3 hrs. Emphasis will be placed on functional anatomy, exercise, physiology, pathophysiology and electrocardiography.
- 808. **Electrocardiography.** 3 hrs. Prerequisite: HPR 706 or permission of instructor. This course is designed to provide an understanding of resting and exercise electrocardiogram.
- 821. Advanced Administration of Human Performance Programs. 3 hrs. Prerequisite: HPR 720. Analysis of leadership and supervision for effective management of human performance programs.
- 831. Gross Anatomy. 3 hrs. Prerequisite: HPR 703. Special attention is given to osteology, myology, and neurology, with hands-on dissection experience acquired from a variety of cadaveric and primate specimens. Concurrent enrollment in HPR 831L required.
- 831-L. Gross Anatomy Laboratory. 2 hrs. Prerequisite: HPR 703. Co-requisite: HPR 831. Designed to study dissection techniques and to provide opportunity for doctoral level students to dissect cadaveric and Rhesus monkey specimens.
- 833. **Nutrition and Human Performance.** 3 hrs. The study of diets and dietary ingredients thought to increase physical capacity with special attention paid to ongoing research in nutrition and athletic performance.
- 834. Advanced Biomechanics. 3 hrs. Prerequisite: HPR 703. The study of the mechanical foundations and advanced analytical techniques of human motion.
- 840. **Readings in Human Performance.** 3 hrs. Prerequisite: Permission of instructor. Extensive reading and discussion of human performance literature.
- 845. Research on Teaching Physical Education. 3 hrs. Prerequisite: HPR 745. The analysis, synthesis, and evaluation of past and present research concerning teaching effectiveness in psychomotor skill instruction.
- 898. Dissertation. 12 hrs. Credit deferred until dissertation completed.

#### **INDUSTRIAL ENGINEERING TECHNOLOGY (IET-395)**

- 505. Production and Inventory Control Systems. 3 hrs. Corequisite: IET 505L. Principles of production and inventory planning and control. Forecasting techniques, EOQ, MRP, production scheduling, line balancing, CPM/PERT.
- 505-L. Production and Inventory Control Systems. 0 hrs. Corequisite: IET 505.
- 506. Industrial Automation. 3 hrs. Automation and its implications to industrial processes, economics, and interpersonal relations.
- 507. **Personnel in Technology.** 3 hrs. The procurement, development, and utilization of technical personnel.
- 508. Innovations in Technology. 3 hrs. Introduction to factors involved in technological change within an industrial operation.
- 509. Plant Layout and Material Handling. 3 hrs. Effectiveness of plant layout to the production activity involving personnel, materials, tools, and equipment.
- 510. **Motion and Time Study.** 3 hrs. Corequisite: IET 510L. A study of the optimization of the relationship between technology and personnel.
- 510-L. Motion and Time Study Laboratory. 1 hr. Corequisite: IET 510.
- 540. Alternate Energy Systems. 3 hrs. Study of alternative sources of energy and power.
- 541. Industrial Energy Management. 3 hrs. Technical and economic aspects of industrial energy management, energy conservation techniques, and alternate energy sources.
- 560. Manufacturing Engineering Technology. 2 hrs. Corequisite: IET 560L. Principles and functions essential to the manufacture of tangible products. Materials, processes, quality, and other technical considerations.
- 560-L. Manufacturing Engineering Technology Laboratory. 1 hr. Corequisite: IET 560. Industrial Simulation and Modeling. 3 hrs. Prerequisite: CSS 240. Analysis of discrete-event systems in industry such as plant layouts, materials handling, production methods, and inventory control.
- 592. **Special Problems**. 1-3 hrs. Prerequisite: Senior standing and approval of adviser. Supervised study in selected areas of Industrial Engineering Technology.

# **INTERIOR DESIGN (ID-812)**

597. **British Housing and Interiors.** 3-6 hrs. A series of lectures and tours by English authorities on interior design topics.

# JOURNALISM (JOU-212) See Course Listing under COMMUNICATION.

### **INTERNATIONAL BUSINESS (IB-611)**

- 598. International Business Seminar Abroad. 3-6 hrs.
- 692. Special Problems in International Business. 1-6 hrs.

# LIBRARY AND INFORMATION SCIENCE (LIS-170)

- 501. Introduction to Reference Resources and Services. 3 hrs. An introduction to reference materials, services, activities and functions as well as methods for locating information.
- +505. Cataloging and Classification. 3 hrs. Principles and methods of cataloging and classifying library materials. Provides practice in bibliographical description and subject analysis.
- 506. Advanced Cataloging and Classification. 3 hrs. Prerequisite: LIS 505. Advanced study of the principles and methods of descriptive and subject cataloging and classification with attention to nonprint materials.
- 508. **School Library Media Centers.** 3 hrs. Study of the development and administration of the school library media center.
- 511. Development of Library Collections. 3 hrs. Philosophy and principles governing the selection and procurement of all types of library materials, including the use of selection aids and bibliographic sources for developing both print and non-print collections.
- +516. Utilization of Audiovisual Media and Equipment. 3 hrs. A survey of media resources and equipment with an emphasis on utilization in libraries. Provides experience with equipment.

- 517. Literature and Related Media for Children. 3 hrs. A survey of children's literature, traditional and modern, and other related materials for use by and with children of grades 1-6.
- 518. Literature and Related Media for Adolescents. 3 hrs. Study of adolescent literature and other related materials for use by and with young people of grades 7-12.
- 525. **Instructional Styles and Models in Media Programs.** 3 hrs. The assessment of individualized styles and models of instruction in media programs and media centers.
- 528. **Storytelling**. 3 hrs. Prerequisite: LIS 517 or 518. A study of oral tradition and folk literature with emphasis upon selection of stories and the art and techniques of storytelling. Provides practice in storytelling.
- 533. **History of the Book.** 3 hrs. A study of the origins and early development of books and printing in Western Europe and the Americas.
- 557. Microcomputers in Libraries. 3 hrs. Examine the various applications in which microcomputers are and will be utilized in different types of information centers and libraries.
- 580. British Studies: Studies in Librarianship. 3 hrs. Comparative studies of library and information-related institutions, bibliographic organization, models of service and professional practice in the United States and Great Britain.
- 581. British Studies: Seminar in Children's and Young Adult Literature. 3 hrs. Intensive study of specific topics of British interests in literature for children and adolescents.
- 586. British Studies: Historical Studies in Children's Literature. 3 hrs. Traces the development of children's literature in England and the United States to the early 20th Century.
- 587. **British Studies: Research.** 3 hrs. To provide the opportunity for in-depth research projects using the resources of metropolitan London.
- 591. Issues in School Library Media Centers. 3 hrs. Intensive investigation of the current problems of school library media centers administration.
- 593. **Issues in Public Librarianship.** 3 hrs. Considers problems involved in the administration and supervision of public libraries. Emphasizes topics relevant to participants.
- 605. Library Management. 3 hrs. Analysis of administrative theory and principles of management in libraries.
- 609. **Seminar in Library Management.** 3 hrs. Survey of the problems in the management of library programs. Emphasis on organizing, staffing, financing, and use of evaluation standards.
- 624. Creative Library Programs. 3 hrs. Prerequisite: LIS 517 or 518. Explores the development of creative visual forms and use of cultural resources in library services to children and adolescents.
- 629. **Studies in Children's Literature.** 1-3 hrs. Prerequisite: LIS 517. Advanced study and evaluation of children's literature and publishing trends in the field.
- 631. **History of Libraries.** 3 hrs. Development of libraries from ancient times to the present with special reference to the relationship of libraries to sociocultural, economic, and political trends.
- 634. History of Children's Literature. 3 hrs. Prerequisites: LIS 517 or 518. Traces the development of children's literature in England and the United States to the early twentieth century.
- 636. The Library in American Society. 3 hrs. The library as a social institution, its background, and the forces that have shaped its development.
- 637. Seminar in the Development of Information Transfer Devices, 3 hrs. Study of the diversity, development, and uses of information transfer devices from ancient times to the present.
- 638. History of Printing and Publishing. 3 hrs. Study of the history of the book and book trade from Renaissance Europe until present day United States. Analyzed and discussed are the printing process, the spread of printing, and the development of publishing with an emphasis on trade and scholarly publishing. Analogies between the printing and computer revolutions, and the impact of the computer on modern publishing are identified, developed, and discussed.
- 640. **Academic Libraries**. 3 hrs. The development and administration of the academic library.
- 641. **Public Libraries.** 3 hrs. The development and administration of the public library. Problems in public library services.
- 642. Special Libraries. 3 hrs. The development and administration of the special libraries serving businesses, institutions, and government agencies.

- 646. Special Collections and Archives. 3 hrs. Prerequisites: LIS 501 and 505. The acquiring, processing, servicing, and management of collections composed of rare books, manuscripts, archival papers, oral history files, and other special materials.
- 647. **Introduction to Archival Organization.** 3 hrs. Basic instruction in handling materials of archival significance, and on the development of the archives-library relationship.
- 648. Archival Practicum. 2-4 hrs. Prerequisite: LIS 647. Provides an opportunity for supervised practice in special collections and archival operations.
- 649. **Preservation of Documentary Materials.** 3 hrs. The care and preservation of documentary materials in their various formats including techniques for conservation, preservation, and restoration.
- 651. **Introduction to Information Science.** 3 hrs. Survey of information science as a field of study; the role of major information and documentation centers.
- 654. **Library Automation.** 3 hrs. Prerequisite: LIS 557. Study of the theory of computer programming and its application to the solution of the library problems.
- 655. On-Line Technical Services. 3 hrs. Prerequisite: LIS 505. Coverage of the technical services aspects of bibliographic utilities, chiefly OCLC (an online computer library center), its subsystems, and the MARC formats.
- 656. **On-Line Reader Services.** 3 hrs. Prerequisites: LIS 501 and LIS 557. Coverage of the numerous online data bases which currently provide access to scholarly published literature.
- 663. Subject Bibliography. 1-3 hrs. Prerequisite: LIS 501 for library science students. An evaluation of information resources in various subject fields with emphasis on characteristics of subject literatures, problems of use, and bibliographical control and organization.
- 664. **Government Publications.** 3 hrs. Prerequisite: LIS 501. Study of the types of government publications and tools for their bibliographic organization.
- 665. **Bibliography of the Humanities.** 3 hrs. Prerequisite: LIS 501. Study, evaluation, and utilization of information resources in the humanities.
- 666. **Bibliography of the Social Sciences.** 3 hrs. Prerequisite: LIS 501. Study, evaluation, and utilization of library and information resources in the social sciences.
- 667. **Bibliography of Science and Technology.** 3 hrs. Prerequisite: LIS 501. Study evaluation, and utilization of information resources in the pure and applied sciences.
- 668. **Research Methods in Library Science.** 3 hrs. Survey of scientific research methods and their application to the field of library and information science.
- 670. Library Services and Resources for Adults. 3 hrs. The role of libraries in meeting informational and recreational needs of adults; lifelong learning, services to special groups, and popular culture collections.
- 675. Seminar in the Organization of Materials. 3 hrs. Prerequisites: LIS 505 and LIS 506. An examination of the historical, theoretical, and practical aspects of processing information through an analysis of descriptive and subject techniques (schemes and lists) with emphasis on the Library of Congress Classification.
- 689. Library Practicum. 2-4 hrs. Prerequisite: Permission of the practicum coordinator.
- 691. Research in Library Science. 1-16 hrs. Prerequisite: Permission of Director.
- 692. **Special Problems in Librarianship.** 1-3 hrs. A problem study to be approved by the Director.
- 694. **Field Problems.** 3 hrs. Prerequisite: Permission of Director. Practical experiences in dealing with problem situations in the field and related institutional settings.
- 695. Master's Project. 2 hrs. A written project dealing with a specific problem or issue in the field of library and information studies under faculty supervision.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 702. **Bibliography for Music Research.** 3 hrs. Prerequisite: LIS 501. An extensive examination of research materials, including music and non-music reference works.

#### **MANAGEMENT (MGT-620)**

- 500. Management Theory. 3 hrs. An analysis of managerial functions, concepts, and practices within organizations. See also MBA 500.
- 598. International Management Seminar Abroad. 3 hrs. Prerequisite: Consent of Program Director. Conducted in London, England: A series of lectures and discussions involving authorities on international management issues and practices.
- 610. **Organizational Management.** 3 hrs. Prerequisite: MBA 500 or the equivalent. Applications of analytical and communication skills in solving complex management problems. See also MBA 610.
- 620. **Organizational Behavior and Practice.** 3 hrs. Prerequisite: MBA 500 or the equivalent. Study and skill-building in interpersonal and small-group relationships as found in various organizations.
- 630. Survey of Labor-Management Relations. 3 hrs. Prerequisite: MBA 500 or the equivalent. A survey of the development of labor law and collective bargaining.
- 640. Advanced Personnel Administration. 3 hrs. Prerequisite: MBA 500 or the equivalent. An in-depth study of U.S. and international human resource administration.
- 645. International Management. 3 hrs. Prerequisite: MBA 500 or the equivalent. A case course of comparisons of problems in Management in the U.S. with those of other countries.
- 692. Special Problems in Management. 1-6 hrs. Prerequisite: Permission of department chair.
- 699. International Management Research Abroad. 3 hrs. Prerequisite: Consent of Program Director. A research course in international management offered for students enrolled in MGT 598.

#### **MANAGEMENT INFORMATION SYSTEMS (MIS-630)**

580. Management Information Systems. 3 hrs. Prerequisite: Computer literacy. An analysis of the impact of information systems and technology on organizations. See also MBA 580.

# MANUFACTURING TECHNOLOGY (MFG-389)

- 610. Advanced Quality Control and Reliability. 3 hrs. Techniques and tools in quality assurance; management of quality as a system; computers in quality control; quality circles; statistical process control; reliability; Taguchi method.
- 620. Manufacturing Resources. 3 hrs. Study of forecasting models; production and inventory control systems; MRP II; just-in-time techniques of inventory control.
- 630. Advanced Manufacturing Systems. 3 hrs. Study of manufacturing as a system; economics; optimization of machining; modern production processes; tool and work materials (diamonds, composites and ceramics).
- 640. CAD/CAM Technology I. 2 hrs. Corequisite: MFG 640L. CAD/CAM techniques utilizing micro-computers and modern CAD/CAM software; solid modeling; finite element analysis; design for manufacturing, including assembly.
- 640-L. CAD/CAM Technology I Laboratory. 1 hr. Corequisite: MFG 640.
- 641. CAD/CAM Technology II. 2 hrs. Prerequisite: MFG 640. Corequisite: MFG 641L. Extension of MFG 640 in the area of CNC machining and other considerations in manufacturing products.
- 641-L. CAD/CAM Technology II Laboratory. 1 hr. Corequisite: MFG 641.
- 650. Plant Engineering Technology. 3 hrs. Manufacturing facility as operating system; plant and preventive maintenance; signature analysis; health and safety at work-place; quality of worklife; utilities management.
- 660. Computer Integrated Manufacturing. 3 hrs. CIM concept and technology; FMS, CAPP, GT; data communication and networks; data base management/systems; management and human resources issues; factory of the future.
- 670-L. Advanced Manufacturing Laboratory. 2 hrs. Experiments employing advanced techniques to demonstrate the interrelation at various phases of producing manufactured goods.
- 680. **Manufacturing Seminar.** 1 hr. Discussion of modern manufacturing topics of interest; participation through presentation and attendance required; not to be counted as credit toward degree.
- 691. Research in Manufacturing Technology. 1-9 hrs. Investigation of current research and literature in manufacturing; development of writing skills; a thesis/project prospectus must be orally defended. A maximum of 6 hours credit can be applied toward a degree in Engineering Technology.

- 692. **Special Problems in Manufacturing.** 1-6 hrs. Investigation and study of a specific problem not related to thesis research.
- 693. Manufacturing Industry Internship. 1-3 hrs. Study of a local industry through shop-floor training to appreciate the manufacturing environment. A specific project must be approved prior to enrollment.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

  Students who are not in residence and are not enrolled in at least 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. Prerequisites: Consultation with and permission of major professor. Credit deferred until thesis is completed.

## **MARINE SCIENCE (MAR-322)**

- 501. **Biological Oceanography.** 3 hrs. Marine biological regimes and the influence of geological, physical, and chemical oceanographic features.
- 501-L. Biological Oceanography Laboratory. 1 hr. A laboratory for MAR 501.
- 502. Marine Environmental Science. 3 hrs. A study of the problems that affect the coastal and nearshore environments of the Gulf of Mexico.
- 503. Marine Invertebrate Zoology. 3 hrs. Morphology, distribution and ecology of the phyla from Protozoa through Protochordates. May be taken as BSC 521.
- 503-L. Marine Invertebrate Zoology Laboratory. 3 hrs. Corequisite for MAR 503. May be taken as BSC 521-L.
- 504. Parasites of Marine Animals. 3 hrs. Prerequisite: Permission of instructor. Emphasis on morphology, taxonomy, life histories, and host-parasite relationships. May be taken as BSC 524.
- 504-L. Parasites of Marine Animals Laboratory. 3 hrs. Corequisite for MAR 504. May be taken as BSC 524-L.
- 505. Marine Ecology. 3 hrs. The relationship of marine organisms to their environment. May be taken as BSC 539.
- 505-L. Marine Ecology Laboratory. 2 hrs. Corequisite for MAR 505. May be taken as BSC 539-L.
- 506. Fauna and Faunistic Ecology of Tidal Marshes. 1 hr. Taxonomy, distribution, trophic relationships, reproductive strategies and adaption of tidal marsh animals. May be taken as BSC 548.
- 506-L. Fauna and Faunistic Ecology of Tidal Marshes Laboratory. 3 hrs. Corequisite for MAR 506. May be taken as BSC 548-L.
- 507. Marine Aquaculture. 3 hrs. Problems and procedures relating to the culture of commercially important crustaceans, fish, and mollusks. May be taken as BSC 547.
- 507-L. Marine Aquaculture Laboratory. 3 hrs. Corequisite for MAR 507. May be taken as BSC 547-L.
- 508. Marine Ichthyology. 3 hrs. Lecture and laboratory survey of marine chordates, including fishes, reptiles, mammals, and shore birds.
- 508-L. Marine Ichthyology Laboratory. 3 hrs. Corequisite for MAR 508.
- 509. Marine Microbiology. 3 hrs. Prerequisite: General Microbiology. An introduction to the role of microorganisms in the overall ecology of the oceans and estuaries. May be taken as BSC 590.
- 509-L. Marine Microbiology Laboratory. 2 hrs. Corequisite for MAR 509. May be taken as BSC 590-L.
- 510. Marine Fisheries Management, 2 hrs. Prerequisite: Statistics recommended. A statistical review of the world fisheries. May be taken as BSC 549.
- 510-L. Marine Fisheries Management Laboratory. 2 hrs. Corequisite for MAR 510. May be taken as BSC 549-L.
- 520. Marine Phycology. 2 hrs. Prerequisites: General botany and plant taxonomy. A survey of the principal groups of marine algae. May be taken as BSC 527.
- 520-L. Marine Phycology Laboratory, 2 hrs. Corequisite for MAR 520. May be taken as BSC 527-L.
- 521. Coastal Vegetation. 2 hrs. A study of general and specific aspects of coastal vegetation, with emphasis on local examples. May be taken as BSC 537.
- 521-L. Coastal Vegetation Laboratory, 1 hr. Corequisite for MAR 521. May be taken as BSC 537-L.

- 522. Salt Marsh Plant Ecology. 2 hrs. The botanical aspects of marshes; includes plant identification, composition, and structure. May be taken as BSC 538.
- 522-L. Salt Marsh Plant Ecology Laboratory. 2 hrs. Corequisite for MAR 522. May be taken as BSC 538-L.
- 530. Comparative Histology of Marine Organisms. 3 hrs. Histology of marine organisms, including tissue processing techniques. May be taken as BSC 568.
- 530-L. Comparative Histology of Marine Organisms Laboratory. 3 hrs. Corequisite for MAR 530. May be taken as BSC 568-L.
- 541. Marine Chemistry. 3 hrs. Prerequisites: BSC 111, CHE 352, MAT 179 or permission of instructor. Sea water chemistry and cycles and their impact on the marine environment.
- 541-L. Marine Chemistry Laboratory. 1 hr. A laboratory designed to accompany MAR 541. Concurrent registration in MAR 541 is required.
- 556. Techniques in Marine Science Education. 3 hrs. Prerequisite: Permission of instructor. Designed to acquaint teachers with the marine resources of the Mississippi Coastal Zone. May be taken as SCE 556.
- 557. Marine Science for Teachers. 3 hrs. Prerequisite: Permission of instructor. Emphasis will be placed on measurements and analysis of the marine habitat and ecological relationships. May be taken as SCE 557.
- 558. Marine Science for Elementary Teachers. 3 hrs. Prerequisite: Permission of instructor. Designed to acquaint teachers with marine science concepts. May be taken as SCE 535.
- 559. Coastal Ecology for Teachers. 3 hrs. Prerequisite: Permission of instructor. Corequisite: MAR 559-L. Designed to provide teachers with a background in basic coastal ecology. May be taken as SCE 559.
- 559-L. Coastal Ecology for Teachers Laboratory. 1 hr. Prerequisite: Permission of instructor. Corequisite: MAR 559. May be taken as SCE 559-L.
- 561. Physical Oceanography. 3 hrs. Prerequisites: PHY 112, or 202 and MAT 179 or permission of instructor. An introduction to the physical properties and processes of the oceans. May be taken as PHY 571.
- 561-L. Physical Oceanography Laboratory. 1 hr. A laboratory designed to accompany MAR 561.
- 563. Physical Applications of the Fourier Transform. 3 hrs. Prerequisites: MAT 280 and PHY 202. Applications of the fourier transform to measurements in physics. (May be taken as PHY 451)
- 566. Acoustics. 3 hrs. Prerequisites: MAT 471, permission of instructor. Principles of the generation, transmission and reception of acoustic waves. May be taken as PHY 546.
- 581. Geological Oceanography. 3 hrs. Prerequisite: GLY 101, 103 or permission of instructor. Study of the formation and deformation of the oceanic crust and the distribution and character of marine sediments.
- 581-L. Geological Oceanography Laboratory. 1 hr. Pre- or corequisite: MAR 581. Examination and interpretation of marine geological samples and data.
- 582. Coastal Marine Geology. 3 hrs. Prerequisites: 12 credit hours in geology. A study of inshore and nearshore geological processes, sedimentation patterns and landform development. May be taken as GLY 531.
- 585. Microcomputer Applications in Marine Science Instrumentation. 3 hrs. Introduction to programming and hardware concepts relevant for marine science applications.
- 590. Special Problems in Marine Science. 1-6 hrs. Prerequisite: Permission of instructor. Independent research.
- 591. Special Topics in Marine Science. 1-6 hrs. Prerequisite: Permission of instructor. Directed study in area for which no formal courses are offered.
- 604. Early Life History of Marine Fishes. 2 hrs. Reproductive strategies and early developmental processes of marine fishes. May be taken as BSC 604.
- 604-L. Early Life History of Marine Fishes Laboratory. 2 hrs. Corequisite for MAR 604. May be taken as BSC 604-L
- 620. Marine Sediments and Sedimentary Environments. 3 hrs. Prerequisites: GLY 501 and MAR 581 or permission of instructor. Principal marine sedimentary environments characterized by constituents, facies, and dispositional processes.
- 641. Global Carbon System. 3 hrs. Prerequisite: MAR core courses or permission. An examination of the biogeochemical cycling of carbon through global systems with an emphasis on the problem of climate change.

- 644. Marine Mineral Deposits. 3 hrs. Prerequisite: Permission of instructor. Genesis and mode of occurrence of continental shelf and deepsea mineral deposits. May be taken as GLY 686.
- 650. Coastal Marine Chemistry. 3 hrs. Prerequisite: Consent of instructor. Examination of oceanic phenomena of the coastal ocean and estuarine zone from a chemical perspective.
- 651. Marine Oceanic Geochemistry. 3 hrs. Prerequisite: MAR 541 or permission of instructor. Geochemical cycles of organic compounds in the marine environment.
- 655. Estuaries. 3 hrs. Prerequisite: MAR core courses or permission of instructor. An introduction to estuary processes and ecology with discussion of the impact of human activities.
- 662. Introduction to Dynamical Oceanography. 3 hrs. Prerequisite: Permission of instructor. An introductory course that describes the different types of motions observed in the oceans and on its surface. It includes the study of ocean currents and waves starting with basic principles of physics. May be taken as PHY 510.
- 669. Wave-Current Interactions with Applications to Remote Sensing. 3 hrs. An introductory study of different approaches to wave-current interactions, their underlying assumptions and their effects on remote sensing and on upper ocean dynamics.
- 670. Coastal Physical Oceanography. 3 hrs. Prerequisites: MAR 561 and MAR 562 or permission of instructor. Dynamic circulation of continental shelves; includes steady and time-varying flows, pressure gradients, wind stress, bottom friction and oceanic forcing.
- 682. Special Topics in Biological Oceanography. 1-9 hrs. Prerequisite: permission. Study of a selected area in biological marine science. May be repeated.
- 683. Special Topics in Marine Chemistry. 1-9 hrs. Prerequisite: permission. Study of a selected area in chemical marine science. May be repeated.
- 684. Special Topics in Geological Oceanography. 1-9 hrs. Prerequisite: permission. Study of a selected area in geological marine science. May be repeated.
- 685. Special Topics in Physical Oceanography. 1-9 hrs. Prerequisite: permission. Study of a selected area in physical marine science.
- 689. **Seminar in Marine Science.** 1 hr. Prerequisite: Permission of instructor. Current topics in marine science explored via student discussion and presentation. May be repeated.
- 691. **Directed Research in Marine Science**. 1-16 hrs. Prerequisite: permission. Independent research conducted under the direction of a faculty member. May be repeated.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

  Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. Prerequisite: Permission of instructor.
- 791. Directed Research in Marine Science. 1-12 hrs. Prerequisite: Approval of the major professor.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 898. Dissertation. 12 hrs. Prerequisite: Approval of major professor.

#### **MARKETING (MKT-625)**

- 550. Marketing Foundations. 3 hrs. An analysis of marketing functions, concepts, and practices in managerial decision making. See also MBA 550.
- 595. International Marketing. 3 hrs. Prerequisites: MKT 300 and Graduate status. The economic, political, and cultural aspects of international business operations.
- 598. International Marketing Seminar Abroad. 3 hrs. Prerequisite: Permission of Program Director. Conducted in London, England: a series of lectures and discussions involving authorities on international marketing issues and practices.
- 605. Problems in Marketing Management. 3 hrs. Prerequisite: MKT 550 or the equivalent. Applications of analytical and communication skills in solving complex marketing problems. See also MBA 605.
- 635. Seminar in Consumer Behavior. 3 hrs. Prerequisite: MKT 300. Application of behavioral science concepts to research and marketing decisions.
- 640. Marketing Planning. 3 hrs. Prerequisite: MKT 300. An applications-oriented approach to strategic and operational marketing problems.
- 650. Seminar in Marketing Research. 3 hrs. Prerequisites: BA 302 and MKT 300. A study of advanced research techniques used in market analysis.
- 692. **Special Problems in Marketing.** 1-6 hrs. Consent of the chair of the Marketing Department is required prior to registration.
- 699. International Marketing Research Abroad. 3 hrs. Prerequisite: Consent of Program Director. A research course in international marketing offered for students enrolled in MKT 598.

# MASS COMMUNICATION (MC-208) See Course Listing under COMMUNICATION.

#### **MASTER OF BUSINESS ADMINISTRATION (MBA-613)**

- 500. Management Theory. 3 hrs. An analysis of managerial functions, concepts, and practices within organizations. See also MGT 500.
- 511. Financial Accounting. 3 hrs. Prerequisite: Computer literacy. Fundamentals of accumulating, reporting, and interpreting financial accounting information for internal and external uses. See also ACC 511.
- 520. Managerial Economics. 3 hrs. Prerequisites: Computer literacy; calculus. An examination of microeconomic theory as applied to managerial decision making. See also ECO 520.
- 530. Statistics for Managers. 3 hrs. Prerequisite: Computer literacy. An examination of statistical techniques as applied to managerial decision making.
- 545. Communication Skills for Managers. 1.5 hrs. Prerequisite: Admission to MBA or MPA program. A course designed to develop communication skills as they relate to managerial effectiveness.
- 546. Legal Environment of Management. 1.5 hrs. A survey of the major legal considerations affecting managerial decision making.
- 550. Marketing Foundations. 3 hrs. An analysis of marketing functions, concepts, and practices in managerial decision making. See also MKT 550.
- 560. Managerial Accounting. 3 hrs. Prerequisite: MBA 511 or the equivalent. An analysis of the use of accounting information in managerial decision making. See also ACC 560.
- 570. Managerial Finance. 3 hrs. Prerequisites: Computer literacy; MBA 511 or the equivalent. A study of financial analysis in managerial decision making. See also FIN 570.
- 580. Management Information Systems. 3 hrs. Prerequisite: Computer literacy. An analysis of the impact of information systems and technology on organizations. See also MIS 580.
- 585. Integrative Management. 1.5 hrs. Prerequisites: Admission to MBA program and permission of CBA Dean. An analysis of strategies and decision making using case studies to integrate all business functions.
- 598. International Business Seminar Abroad. 3-6 hrs.
- 600. **Business and Society.** 3 hrs. Prerequisite: Permission of CBA Dean. An examination of internal and external factors influencing decision making with an emphasis on ethics, civic responsibility, social responsiveness, and professional values.
- 605. **Problems in Marketing Management.** 3 hrs. Prerequisite: MBA 550 or the equivalent. Applications of analytical and communication skills in solving complex marketing problems. See also MKT 605.

- 610. **Organizational Management.** 3 hrs. Prerequisite: MBA 500 or the equivalent. Applications of analytical and communication skills in solving complex management problems. See also MGT 610.
- 620. Macroeconomic Analysis for Managers. 3 hrs. Prerequisites: MBA 520; MBA 530. An examination of the use of macroeconomic analysis and information in managerial decision making.
- 630. **Operations Management.** 3 hrs. Prerequisite: MBA 500. An analysis of modern operations management in terms of efficiency, productivity, quality, and service to the customer.
- 640. **Problems in Corporate Finance.** 3 hrs. Prerequisite: MBA 570. Applications of financial theory to complex financial problems.
- 650. Business Modeling. 3 hrs. Prerequisite: MBA 580. An examination of the theory and applications of formal models in managerial decision making.
- 660. Managerial Strategy and Planning. 3 hrs. Prerequisite: Permission of the CBA Dean. An analysis of strategic business planning and implementation from the perspective of top management.
- 685. Managing in a Global Environment. 1.5 hrs. Prerequisites: MBA 620 and MBA 640. An analysis of the global environment and its implications for managerial decision making.
- 686. Federal Taxes and Management Decisions. 1.5 hrs. Prerequisite: MBA 560. An analysis of federal tax concepts with an emphasis on tax planning.
- 692. Special Problems in Business Administration. 1-6 hrs.

#### MATHEMATICS (MAT-350)

- 500. Mathematics Teaching Seminar. 1 hr. Indepth topics related to preparing and presenting lessons, testing and grading, and classroom management, includes videotaping of practice teaching sessions. (Does not count as program credit for M.S. in mathematics.)
- 508. Mathematical Foundations for Inservice Elementary School Teachers. 3 hrs. Numeration, place value, intuitive geometry, measurement, arithmetic algorithms. (Does not count as program credit for M.S. in mathematics.)
- 509. Mathematical Foundations for Inservice Middle School Teachers. 3 hrs. Intuitive geometry, integers, rational numbers, probability, graphing, metric system, word problems. (Does not count as program credit for M.S. in mathematics.)
- 510. Mathematics for Teachers of Junior High School Mathematics. 3 hrs. The real number system and major subsystems, introduction to algebra, informal geometry, consumer mathematics and introduction to BASIC programming. (Open only to elementary and special education majors and does not count as program credit for M.S. in mathematics.)
- 515. **Introduction to Differential Equations II.** 3 hrs. Prerequisite: MAT 385. Systems of linear differential equations, characteristic equations, operator methods, approximating solutions, Laplace transforms.
- 517. Introduction to Partial Differential Equations. 3 hrs. Prerequisite: MAT 385. Integrability conditions, quasilinear and linear equations, applications to physics, classification of second order equations and canonical forms, separation of variables.
- +518.\* Linear Programming. 3 hrs. Prerequisite: MAT 326. Convex sets, linear inequalities, extreme-point solutions, simplex procedure, applications.
- +519.\* Optimization in Mathematical Programming. 3 hrs. Prerequisites: MAT 280 and 418. Selected topics in optimization from linear and nonlinear programming.
- 520. Probability and Mathematical Statistics II. 3 hrs. Prerequisite: MAT 320. Central limit theorem, estimation, hypothesis tests.
- 521. Number Theory. 3 hrs. Prerequisite: MAT 340. Induction, well ordering, division algorithm, Euclidean algorithm, Fundamental Theorem of Arithmetic, number theoretic functions, congruences.
- 523. **Modern Algebra I.** 3 hrs. Prerequisite: MAT 340. Elementary notions in groups, Fundamental Theorem of Finitely Generated Groups, permutation groups, quotient groups, the isomorphism theorems, applications of transformation groups.
- 524. Modern Algebra II. 3 hrs. Prerequisite: MAT 423. Survey of standard algebraic systems: rings, integral domains, fields, modules, polynomial rings, quotient rings, fields of quotients.
- 526. Linear Algebra II. 3 hrs. Prerequisite: MAT 326. Determinants polynomials; complex numbers; single linear transformations; orthogonal, unitary, and symmetric linear transformations.
- 536. Theory of Functions of a Complex Variable I. 3 hrs. Prerequisite: MAT 280. Complex numbers and functions, limits, continuity, differentiation, analytic functions, branches, contour integration, series.

- 537. Graph Theory, 3 hrs. Prerequisite: MAT 340. An introduction to graphs and a sampling of their numerous and diverse applications.
- 539. Combinatorics. 3 hrs. Prerequisites: MAT 326, 340, and 169 or 179. Counting and enumeration techniques, inversion formulas and their applications, and counting schemata relative to permutations of objects.
- 541. Advanced Calculus I. 3 hrs. Prerequisites: MAT 280 and 340. Point set theory, sequences, continuity, uniform continuity, limits, mean value theorems, L'Hospital's rule.
- 542. Advanced Calculus II. 3 hrs. Prerequisite: MAT 441. Riemann integration, Taylor's theorem, improper integrals, infinite series, uniform convergence.
- 543. **Advanced Calculus III.** 3 hrs. Prerequisite: MAT 542 or permission of instructor. Vector-valued functions of several variables, to include Inverse and Implicit Function Theorems, multiple integrals, line and surface integrals.
- 560.\* Numerical Analysis I. 3 hrs. Prerequisites: MAT 280, 326, and knowledge of a programming language. Methods of solving equations and systems of equations, error analysis, difference equations.
- 561.\* Numerical Analysis II. 3 hrs. Prerequisites: MAT 385 and 460. Interpolating polynomials, numerical differentiation and integration, numerical solutions of differential equations, roundoff error.
- \* Students will use University computers and appropriate software as a part of course requirements.
- 572. **Modern Geometry**, 3 hrs. Prerequisite: MAT 280, 316 or 326, and 340. Heuristic and analytic treatment of a branch of modern geometry, such as projective or differential geometry.
- 575. General Topology, 3 hrs. Prerequisite: MAT 169 or 179, and 340. General topological spaces, bases and subbases, continuity.
- 581. **History of Mathematics.** 3 hrs. Prerequisite: MAT 167 or 178. The history of mathematics from antiquity through the 17th century. (Does not count as program credit for M.S. in mathematics.)
- 588. Mathematics for Inservice Secondary School Teachers I. 1-3 hrs. Prerequisites: 24 hours of mathematics excluding pre-calculus courses, secondary mathematics teaching experience. Special mathematical topics for inservice secondary school mathematics teachers, to include algebra, number theory, graph theory, and combinatorics. (Does not count as program credit for M.S. in mathematics.)
- 589. Mathematics for Inservice Secondary School Teachers II. 1-3 hrs. Prerequisites: 24 hours of mathematics excluding pre-calculus courses, secondary mathematics teaching experience. Special mathematical topics for inservice secondary school mathematics teachers, to include probability theory, analysis, applied mathematics, topology, geometry. (Does not count as program credit for M.S. in mathematics.)
- 592. Special Problems I, II. 1-3 hrs. each.
- 601. Differential Geometry I. 3 hrs. Prerequisite: MAT 431. An introduction to the theory of plane curves, space curves, and surface.
- 603. Modern Algebra. 3 hrs. Prerequisite: MAT 424. Simple groups, solvable groups, the Sylow theorems, presentations of groups, category terminology, introductory homological algebra.
- 605. Ordinary Differential Equations. 3 hrs. Prerequisite: MAT 385. Topics from the theory of ordinary differential equations. Specific topics to be selected by the instructor.
- 606. Partial Differential Equations. 3 hrs. Prerequisite: MAT 385. Dirichlet, Neumann, and mixed boundary value problems; classical techniques of solution of partial differential equations & applications.
- 610. Numerical Linear Algebra. 3 hrs. Prerequisite: MAT 326 and a knowledge of eigenvalues and eigenvectors. Theory and practice of matrix computations, matrix norms, singular value decomposition, linear systems, LU decomposition, QR decomposition, methods for eigenvalue problems.
- 629. Applied Combinatorics and Graph Theory. 3 hrs. Prerequisite: CSC 616 or permission of instructor. Combinatorial/graphical techniques for complexity analysis recurrence relations, Polya theory, NP complete problems. May also be taken as CSC 629.
- 636. Functions of a Complex Variable II. 3 hrs. Prerequisite: MAT 436. Taylor and Laurent series, residue calculus, conformal mapping with applications, integral formulas of the Poisson type, analytic continuation.

- 637. Functions of a Complex Variable III. 3 hrs. Prerequisite: MAT 636. A continuation of MAT 636.
- 641. Functions of a Real Variable I. 3 hrs. Prerequisite: MAT 442. Foundations of real analysis and introduction to Lebesgue integration.
- 642. Functions of Real Variable II. 3 hrs. Prerequisite: MAT 641. Continuation of MAT 641.
- 675. **Topology**. 3 hrs. Prerequisite: MAT 475. Properties of topological spaces such as imbedding and extension theorems, metrizability and compactification.
- 681. **Topics in Algebra I, II, III.** 3 hrs. Prerequisites: MAT 423 and permission of instructor. May be repeated for a maximum of nine hours credit.
- 682. **Topics in Analysis I, II, III.** 3 hrs. Prerequisite: Permission of instructor. May be repeated for a maximum of nine hours credit.
- 683. **Topics in Topology and Geometry I, II, III.** 3 hrs. Prerequisite: Permission of instructor. May be repeated for a maximum of nine hours credit.
- 684. Topics in Applied Mathematics I, II, III. 3 hrs. Prerequisite: Permission of instructor. May be repeated for a maximum of nine hours credit.
- 689. Mathematics Seminar I, II. 3 hrs. Prerequisite: Permission of instructor. Six hours of seminar are required for the M.S. degree in Mathematics.
- 691. Research in Mathematics. 1-16 hrs. (Does not count as program credit for M.S. in mathematics.)
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

  Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs.

# MATHEMATICS REFRESHER AND ENRICHMENT PROGRAM (M-REP-350)

- 582. **Precalculus Review I.** 1-3 hrs. A review of topics from elementary, intermediate, and advanced algebra, with an emphasis upon applications relevant to the high school curriculum.
- 583. **Precalculus Review II.** 1-3 hrs. Prerequisite: MAT 582 or permission of instructor. A review of topics from trigonometry and elementary functions, with an emphasis upon applications relevant to the high school curriculum.
- 584. Calculus Review I. 1-3 hrs. Prerequisite: MAT 583 or permission of instructor. A review of topics from single-variable calculus to include limits, continuity, derivatives, and integration, with applications relevant to the high school curriculum.
- 585. Calculus Review II. 1-3 hrs. Prerequisite: MAT 584 or permission of instructor. A review of topics from single-variable calculus to include methods of integration, L'Hospital's rule, improper integrals, infinite series and vectors, with applications relevant to the high school curriculum.
- 586. **Geometry Review for High School Teachers.** 1-3 hrs. May be repeated for a maximum of 6 semester hours. Topics from Euclidean geometry, transformational geometry, plane analytic geometry, and topology.
- 587. Problem Solving in School Mathematics. 1-3 hrs. Prerequisite: MAT 585 or permission of instructor. May be repeated for a maximum of 6 semester hours. Includes strategies for solving both standard and non-standard mathematical problems.
- None of the courses MAT 582 587 will count toward any degree in mathematics.

# **MECHANICAL ENGINEERING TECHNOLOGY (MET-397)**

- 510. **Production Materials.** 3 hrs. Study of properties of materials for cutting, drilling, forming, and heat treating operations.
- 520. Robotics. 3 hrs. Fundamentals of hydraulic, pneumatic, and electrically-controlled industrial robots. Robot geometry, installation and applications in industrial processes.
- 592. Special Problems. 1-3 hrs. Prerequisite: Senior standing and approval of faculty adviser.

# **MEDICAL TECHNOLOGY (MTC-354)**

- 500. Applied Clinical Procedures. 2 hrs. Prerequisite: a minimum overall GPA of 2.5, "C" or better in MAT 101, second higher math, CHE 106/106L, and CHE 107/107L. Corequisite: MTC 500L, must be taken with or before other MTC 500 level courses. An introduction to clinical laboratory safety, instrumentation, mathematics, and analytical techniques.
- +500-L. Applied Clinical Procedures Laboratory. 2 hrs. Prerequisite: a minimum overall GPA of 2.5, "C" or better in MAT 101, second higher math, CHE 106/106L, and CHE 107/107L. Corequisite: MTC 500, must be taken with or before other MTC 500 level courses. A laboratory emphasizing clinical laboratory safety, instrumentation, mathematics, and analytical techniques.
- 501. Advanced Body Fluids. 1 hr. Prerequisite: Admission to the practicum or permission of department. Corequisite: MTC 501L. Analysis of the physical, chemical, and microscopic parameters of body fluids—research component.
- +501-L. Advanced Body Fluids Laboratory. 1 hr. Prerequisite: Admission to the practicum. Corequisite: MTC 501.
- 502. Advanced Clinical Bacteriology I. 3 hrs. Prerequisite: MTC 300, 300L, BSC 380, 380L or permission of instructor. Corequisite: MTC 502L. Evaluation of clinical specimens with regard to pathogenic microorganisms—research component.
- +502-L. Advanced Clinical Bacteriology I Laboratory. 2 hrs. Prerequisite: MTC 300, 300L, BSC 380, 380L or permission of instructor. Corequisite: MTC 502.
- 503. Advanced Clinical Mycology. 1 hr. Prerequisite: Admission to the practicum or permission of department. Corequisite: MTC 503L. The study of pathogenic fungi, emphasis is placed on laboratory methods of isolation and identification of medically important fungi—research component.
- +503-L. Advanced Clinical Mycology Laboratory. 1 hr. Prerequisite: Admission to the practicum. Corequisite: MTC 503.
- 504. Advanced Clinical Chemistry I. 3 hrs. Prerequisite: MTC 300, 300L, CHE 321, 321L, or permission of instructor. Corequisite: MTC 504L. The chemical analysis of body fluids-research component.
- +504-L. Advanced Clinical Chemistry I Laboratory. 2 hrs. Prerequisite: MTC 300, 300L, CHE 321, 321L, or permission of instructor. Corequisite: MTC 504.
- 505. Advanced Clinical Parasitology I. 1 hrs. Prerequisite: Admission to practicum or permission of department. Corequisite: MTC 505L. Study of medically significant protozoan and helminthic parasites and their vectors. Emphasis is placed on laboratory methods of detection and identification of these organisms-research component.
- +505-L. Advanced Clinical Parasitology Laboratory. 1 hr. Prerequisite: Admission to practicum. Corequisite: MTC 505.
- 506. Advanced Fundamentals of Hematology. 3 hrs. Prerequisite: MTC 300, 300L. Corequisite: MTC 506L. An introduction to the study of blood and blood forming organs—research component.
- +506-L. Advanced Fundamentals of Hematology Laboratory. 2 hrs. Prerequisite: MTC 300, 300L. Corequisite: MTC 506.
- 507. Advanced Clinical Immunodiagnostics I. 2 hrs. Prerequisite: Admission to residency or permission of department. Corequisite: MTC 507L. An introduction to immunodiagnostic testing, theory, and practical experience involving antigen-antibody reactions in relation to disease in humans—research component.
- +507-L. Advanced Clinical Immunodiagnostics I Laboratory. 1 hr. Prerequisite: Admission to practicum. Corequisite: MTC 507.
- 508. Advanced Clinical Immunohematology. 3 hrs. Prerequisite: Admission to practicum or permission of department. Corequisite: MTC 508L. The theory and techniques of donor selection, processing blood for transfusion, and resolving incompatibilities—research component.
- +508-L. Advanced Clinical Immunodiagnostics I Laboratory. 2 hrs. Prerequisite: Admission to the practicum. Corequisite: MTC 508.
- 509. Advanced Clinical Chemistry II. 3 hrs. Prerequisite: Admission to practicum or permission of the department. Corequisite: MTC 509L. The chemical analysis of body fluids—research component.

- +509-L. Advanced Clinical Chemistry II Laboratory. 2 hrs. Prerequisite: Admission to the practicum. Corequisite: MTC 509.
- 510. Advanced Special Chemistry. 1 hr. Prerequisite: Admission to the practicum or permission of the department. Corequisite: MTC 510L. Introduction to therapeutic drug monitoring and clinical toxicology with special emphasis on pathophysiology and analyte measurement.
- +510-L. Advanced Special Chemistry Laboratory. 1 hr. Prerequisite: Admission to the practicum. Corequisite: MTC 510.
- 511. Advanced Coagulation. 1 hr. Prerequisite: Admission to the practicum or permission of the department. Corequisite: MTC 511L. The study of hemostasis in the human and its application to clinical laboratory testing, normal and abnormal.
- +511-L. Advanced Coagulation Laboratory. 1 hr. Prerequisite: Admission to practicum. Corequisite: MTC 511.
- 512. Advanced Principles of Clinical Administration and Education. 1 hr. Prerequisite: Admission to residency or permission of department. Introduction of basic principles of clinical laboratory administration and education—research component.
- 514. Advanced Current Topics in Medical Technology. 1 hr. Prerequisite: Admission to practicum or permission of department. Presentation of techniques and procedures that have recently been developed and/or incorporated into the area of clinical laboratory science.
- 522. Advanced Clinical Bacteriology II. 3 hrs. Prerequisite: Admission to the practicum or pennission of department. Corequisite: MTC 522L. Laboratory methods of isolation, identification, and other testing of pathogenic bacteria and their etiologic role in disease—research component.
- +522-L. Advanced Clinical Bacteriology II Laboratory. 2 hrs. Prerequisite: Admission to practicum. Corequisite: MTC 522.
- 526. Advanced Hematology I. 3 hrs. Prerequisite: Admission to the practicum or permission of department. Corequisite: MTC 526L. The study of blood cells and their abnormalities with emphasis on procedures of laboratory examination—research component.
- +526-L. Advanced Hematology I Laboratory. 2 hrs. Prerequisite: Admission to the practicum. Corequisite: MTC 526.
- 551. Advanced Urinalysis. 1 hr. Prerequisite: Successful completion of Phase I of practicum. Clinical education at one of the affiliated hospitals—research component.
- 552. Advanced Clinical Microbiology. 4 hrs. Prerequisite: Successful completion of Phase I of practicum. Clinical education at one of the affiliated hospital laboratories—research component.
- 556. Advanced Hematology II. 3 hrs. Prerequisite: Successful completion of Phase I of practicum. Clinical education at one of the affiliated hospital laboratories—research component.
- 557. Advanced Clinical Immunodiagnostics II. 1 hr. Prerequisite: Successful completion of Phase I of practicum. Clinical education at one of the affiliated hospital laboratories—research component.
- 558. Advanced Blood Bank. 3 hrs. Prerequisite: Successful completion of Phase I of practicum. Clinical education at one of the affiliated hospital laboratories—research component.
- 559. Advanced Clinical Chemistry III. 4 hrs. Prerequisite: Successful completion of Phase I of practicum. Clinical education at one of the affiliated hospital laboratories—research component.
- 561. Oncology. 3 hrs. Prerequisite: Biochemistry or Molecular Biology or permission of instructor. An introduction to the biological and clinical aspects of cancer.
- 689. Medical Technology Seminar. 1 hr. Presentation of current material related to clinical medicine.
- 691. Research, 1-6 hrs.
- 692. Special Problems in Medical Technology. 1-8 hrs. Individuals will be assigned some specific clinical problem in medical technology to investigate under faculty direction.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

  Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis, 1-6 hrs. for a total of 6 hrs.

### MUSIC (MUS-675)

- 531. History of Opera. 3 hrs. The history of musical theatre from Greek drama to present. Open to non-music majors with permission of instructor.
- 532. American Music. 3 hrs. A study of the development of music in North America. Open to non-music majors with permission of instructor.
- 533. 20th Century Music. 3 hrs. Examination of music trends since Debussy and Mahler. Open to non-music majors with permission of instructor.
- 534. Ancient, Medieval, and Renaissance Music. 3 hrs. A study of the rise of music in the ancient world, the beginning of western music and of polyphony. Open to non-music majors with permission of instructor.
- 535. Baroque Music. 3 hrs. The development of musical styles and forms from Monteverdi through J.S. Bach. Open to non-music majors with permission of instructor.
- 536. 18th Century Music. 3 hrs. The development of classical styles and forms, emphasis on style galant, emfindsamer stil and the Viennese classicists. Open to non-music majors with permission of instructor.
- 537. 19th Century Music. 3 hrs. The development of musical romanticism, emphasis on the expansion of classical forms, and the appearance of new stylistic concepts. Open to non-music majors with permission of instructor.
- 539. **Diction.** 3 hrs. Systematic introduction to phonetics of various foreign languages as applied to singing. May be taken for a total of six (6) hours. The second registration permitted only into a section in which the languages emphasized are different.
- 540. Vocal Literature, 2 hrs.
- 541. Vocal Literature. 2 hrs. A continuation of MUS 540.
- 542. Keyboard History and Literature I. 3 hrs. The history and literature of keyboard music from pre-Baroque times through the works of Beethoven.
- 543. **Keyboard History and Literature II.** 3 hrs. The history and literature of keyboard music after Beethoven to the present.
- 544. Organ Literature. 2 hrs.
- 545. Organ Literature. 2 hrs. A continuation of MUS 544.
- 546. Instrumental Literature, 2 hrs.
- 547. Instrumental Literature. 2 hrs. A continuation of MUS 546.
- 548. Choral Literature I. 3 hrs. A survey of choral literature. Study will include materials suitable for school and church choirs as well as standard masterworks.
- 549. Choral Literature II. 3 hrs. Selected topics in choral literature, post-Baroque.
- 550. **Symphonic Literature.** 3 hrs. A history of and literature for the symphony orchestra from 1600 to the present. Open to non-music majors with permission of instructor.
- 551. Chamber Music. 3 hrs. A survey of music for small instrumental ensembles. Open to non-music majors with permission of instructor.
- 553. Church Music Literature and Materials. 3 hrs. Church music repertoire for all choirs and handbells. Supplementary materials such as teaching aids will be included.
- 560. Administration of Church Music. 3 hrs. Administrative procedures for total music program of the church, including basic philosophy, planning, budgeting, promotion, training music leaders, and developing program goals.
- 562. **Hymnology.** 3 hrs. The history of the Christian hymn from its roots to present-day form.
- 571. Seminar in Masterpieces of Music. 3 hrs. Prerequisite: MUS 232 or consent of instructor. A thorough exploration of major compositions from all musical media. May be taken two times. May be taken by non-music majors with the consent of instructor.
- 599. British Studies: Music in Britain Today. 3 to 6 hrs.
- 620. **Music Theory Survey.** 3 hrs. A survey of harmonic, melodic, and rhythmic elements of tonal music. Will not apply towards any doctoral degree or a degree with composition emphasis.
- 630. Music History Survey. 3 hrs. A survey of the major periods of the history of music with emphasis on significant works. Sources useful in the investigation of music are surveyed. Will not apply towards a doctoral degree.

- 692. Special Problems. 1-3 hrs. each. Investigation of specialized areas of interest. May be repeated.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University must enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs.
- 702. Bibliography for Music Research. 3 hrs. An extensive examination of research materials, including music and non-music reference works.
- 711. **Pedagogy of Theory.** 3 hrs. A course in the teaching of music theory in the senior high school as well as the college level.
- 713. Seminar in Music Theory. 2 hrs. For theory and composition majors; open to others with permission of instructor.
- 714. Composition Project. 6 hrs. Open to students with a major in theory and composition.
- 715. **Recital.** 1-3 hrs. Prerequisite: Permission of music performance studies instructor and approval by the major professor. Grade of E may be awarded.
- 721. **Analytical Techniques.** 3 hrs. A course designed to develop technique in analysis of music from the time of early polyphony through the Baroque period.
- 722. **Analytical Techniques.** 3 hrs. A course designed to develop techniques in analysis of music in the Classical and Romantic periods.
- 723. Seminar in 20th Century Compositional Techniques. 3 hrs. A seminar in techniques utilized by composers in the 20th century. Emphasis will be placed on analysis of selected works.
- 724. **Pre-Baroque Counterpoint.** 2 hrs. Contrapuntal writing up to eight parts. Prerequisite: MUS 321 or permission of instructor.
- 725. **Tonal Counterpoint.** 2 hrs. Contrapuntal writing culminating in the fugue. Prerequisite: MUS 322 or permission of instructor.
- 727. **Advanced Orchestration.** 3 hrs. May be taken three times. Prerequisites: MUS 401 or permission of instructor.
- 731. Seminar in Performance Practices I. 3 hrs. A study of the conductor's and performer's problems in the interpretation and performance of vocal and instrumental music of the 17th and 18th centuries.
- 732. Seminar in Performance Practices II. 3 hrs. A study of the conductor's and performer's problems in the interpretation and performance of vocal and instrumental music of the 19th and 20th centuries.
- 752. Band Literature II. 3 hrs. A survey of band literature, grades V and above.
- 761. **Topics in Music Literature.** 3 hrs. A course designed to expand the student's knowledge of music literature through a period, historical, or school approach. May be repeated.
- 786. Concert Band Arranging. 3 hrs. Prerequisite: MUS 401 or permission of instructor. Designed to provide the arranger with essential techniques of scoring for concert band, with special focus on existing concert band music.
- 787. Arranging for School Choruses. 3 hrs. Designed to focus on selected choral music and to provide the arranger with essential techniques of scoring for school chorus.
- 791. Research in Music. 1-16 hrs.
- 792. Special Problems. 1-3 hrs. each, arr. Investigation of specialized areas of interest. May be repeated.
- 794. Major Solo Role in an Opera. 1 hr. Permission of instructor and simultaneous enrollment in Opera Theatre are required.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 821. Advanced Analytical Techniques. 3 hrs. An in-depth analysis of selected works prior to 1750. Prerequisite: MUS 721 or permission of music theory faculty.

- 822. Advanced Analytical Techniques. 3 hrs. An in-depth analysis of selected works chosen from the Classical and Romantic periods. Prerequisite: MUS 722 or permission of the music theory faculty.
- 823. Advanced Analytical Techniques. 3 hrs. An in-depth analysis of selected works chosen from the 20th century. Prerequisite: MUS 723 or permission of the music theory faculty.
- 870. First Doctoral Solo Recital. 3 hrs. Prerequisite: Permission of applied music instructor and approval of the major professor. Grade of E may be awarded.
- 871. **Doctoral Lecture Recital.** 3 hrs. A lecture, delivered by the doctoral candidate, that includes a performance in which the candidate is a principal performer. Prerequisite: Permission of applied music instructor and approval of the major professor. Grade of E may be awarded.
- 872. Second Doctoral Solo Recital. 1 hr. Prerequisite: Permission of applied music instructor and approval of the major professor. Grade of E may be awarded.
- 873. Concerto Performance with Band or Orchestra. 1 hr. Prerequisite: Permission of applied music instructor and approval of the major professor. Grade of E may be awarded.
- 874. **Major Solo Role in an Opera.** 1 hr. Permission of applied music instructor and approval of the major professor. Grade of E may be awarded.
- 875. Major Solo Role in Oratorio. 1 hr. Prerequisite: Permission of music performance studies instructor and approval of the major professor. Grade of E may be awarded.
- 876. Chamber Music Recital. 1 hr. Prerequisite: Permission of music performance studies instructor and approval of the major professor. Grade of E may be awarded.
- 898. Dissertation, 12 hrs.

# **MUSIC EDUCATION (MED-680)**

- 501. Marching Band Methods. 3 hrs. Techniques for developing marching band programs. Emphasis placed upon music selection, rehearsal organization and drill charting techniques. Provides tools for administering and directing marching band programs.
- 502. Advanced Computer-Assisted Marching Band Drill Design. 3 hrs. Introduction to writing marching band drill design. Provides charting-proficient students with skills in developing form and flow. Includes computer lab time.
- 524. **Instrument Repair.** 3 hrs. Designed to give practical experience in preventive maintenance, minor repair and adjustment of string, woodwind, brass and percussion instruments.
- 529. Piano Tuning and Repair. 3 hrs. Study of basic techniques of tuning and repairing pianos.
- 538. Seminar in Band Literature I. 3 hrs. A study, based upon student needs, of selected masterworks for band. May be repeated.
- 544. Arranging for Marching Band. 3 hrs. Designed to provide the arranger with the essential techniques of scoring for the outdoor band. Course will focus on the study of existing arrangements.
- 550. Vocal Pedagogy. 2 hrs. Techniques, practices, and materials used in teaching voice; practical experience in teaching voice.
- 551. Advanced Vocal Pedagogy. 2 hrs. Advanced study of pedagogical materials.
- 590. Piano Workshop. 1-3 hrs. A course designed to meet the needs of the piano teacher, including a survey of standard materials together with a presentation of modern teaching methods. Cannot be applied toward a music degree. May be repeated.
- 591. **Instrumental Workshop.** 1-3 hrs. May be repeated. Cannot be applied toward a music degree.
- 592. Choral Workshop. 1-3 hrs. May be repeated. Cannot be applied toward a music degree.
- 593. Elementary Music Workshop. 1-3 hrs. Intensive examination of current problems, trends, and materials in the field of elementary music education. Cannot be applied toward a music degree. May be repeated.
- 594. Marching Band Workshop. 1-3 hrs. May be repeated. Cannot be applied toward a music degree.
- 595. Instrumental Conductors Conference. 2 hrs. May be repeated. Cannot be applied toward a music degree.
- 596. Choral Conductors Conference. 2 hrs. May be repeated. Cannot be applied toward a music degree.

- 624. **Practicum in Music Education.** 3 hrs. Examination of theory and research on teaching music to precollege and college age students with subsequent application in a real environment.
- 692. Special Problems. 1-3 hrs. Investigation of specialized areas of interest. May be repeated.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs. No thesis will be accepted unless accompanied by an abstract. Theses which employ questionnaires will not be accepted unless accompanied by summaries of the findings to be mailed to respondents.
- 714. Administration and Supervision of Elementary and Secondary School Music Programs. 3 hrs. The organization, supervision, and evaluation of the total music program, including program development, problems of finance, and selection of personnel and equipment.
- 725. Foundations and Principles of Music Education. 3 hrs. Historical and philosophical foundations of the total music education program, and principles of teaching, learning, organization, administration.
- 731. **Graduate Conducting I.** 3 hrs. Development of conducting skill, rehearsal techniques, study and preparation of scores of standard band, choral, and orchestral repertoire. MED 731 and 732 may be repeated but no more than a total of six hours of conducting may be used for a degree.
- 732. **Graduate Conducting II.** 3 hrs. A continuation of MED 731. MED 731 and 732 may be repeated but no more than a total of six hours of conducting may be used for a degree.
- 734. Woodwind Techniques and Materials. 2 hrs. A course dealing with the problems of teaching woodwind instruments and a comprehensive study of woodwind literature.
- 735. **Brass Techniques and Materials.** 2 hrs. A comprehensive survey of teaching techniques for the brasses with a survey of teaching materials emphasizing pedagogy textbooks and books designed for class instruction.
- 736. Percussion Techniques and Materials. 2 hrs. Performance techniques of all percussion instruments and a survey of teaching materials and literature for percussion.
- 737. **String Techniques and Materials.** 2 hrs. A comprehensive survey of teaching techniques for stringed instruments; survey of teaching materials emphasizing pedagogy textbooks and method books.
- 738. **Keyboard Techniques and Materials.** 2 hrs. An examination of keyboard literature as it relates to the techniques and practices of piano instruction.
- 739. Vocal Techniques and Materials. 2 hrs. Techniques and procedures for teaching correct vocal production habits; examination of choral literature for secondary school and collegiate levels.
- 740. **Music Education in the Elementary Schools.** 3 hrs. An advanced course in the development of music education programs for children.
- 750. **Music in General Education.** 3 hrs. An examination of the role of music in the general education of students throughout the educational system.
- 755. **Aesthetics and Psychology of Music.** 3 hrs. An examination of issues and theoretical positions in the areas of philosophy of music and of musical learning.
- 756. Evaluation and Guidance in Music Education. 3 hrs. The administration and interpretation of tests of musical talent and musical achievement.
- 792. Special Problems. 1-3 hrs. Investigation of specialized areas of interest. May be repeated.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 825. **Doctoral Seminar in Music Education.** 3 hrs. Orientation of doctoral study. Studies in the history and philosophy of music education.
- 826. **Doctoral Seminar in Music Education.** 3 hrs. Primary focus on advanced research methods, techniques, and procedures appropriate to the doctoral level of music education.

- 828. Administration of College and University Music Programs. 3 hrs. A practical course in the principles of administration, organization, and goals of music programs at the college or university level.
- 898. Dissertation. 12 hrs.

# **MUSIC PERFORMANCE STUDIES (MUP-670)**

- 601, 602, +603. Piano. 1-4 hrs.
- 604, 605, +606. Harpsichord. 1-4 hrs.
- 611, 612, +613. Organ. 1-4 hrs.
- 614, 615, +616. Flute. 1-4 hrs.
- 617, 618, +619, Oboe, 1-4 hrs.
- 620, 621, +622. Clarinet. 1-4 hrs.
- 623, 624, +625. Saxophone. 1-4 hrs.
- 626, 627, +628, Bassoon, 1-4 hrs.
- 629, 630, +631. Horn. 1-4 hrs.
- 632, 633, +634. Trumpet. 1-4 hrs.
- 635, 636, +637. Trombone. 1-4 hrs.
- 638, 639, +640. Euphonium. 1-4 hrs.
- 641, 642, +643, Tuba. 1-4 hrs.
- 644, 645, +646. Violin. 1-4 hrs.
- 647, 648, +649. Viola. 1-4 hrs.
- 650, 651, +652. Cello. 1-4 hrs.
- 653, 654, +655. String Bass. 1-4 hrs.
- 656, 657, +658. Percussion. 1-4 hrs.
- 661, 662, +663. Voice. 1-4 hrs.
- 664, 665, +666. Harp. 1-4 hrs.
- 667, 668, +669. Guitar. 1-4 hrs.
- 671. Chamber Music. 1 hr. May be repeated.
- 678. Carillon. 1 hr. Participation by audition only. May be repeated.
- 679. Covenant. 1 hr. Participation by audition only. May be repeated.
- 681. Orchestra. 1 hr. May be repeated.
- 682. Band. 1 hr. May be repeated.
- 683. University Chorale. 1 hr. May be repeated.
- 684. Jazz Lab Band. 1 hr. May be repeated.
- 685. Collegium Musicum. 1 hr. May be repeated.
- 686. Oratorio Chorus. 1 hr. May be repeated.
- 687. Jazz Singers. 1 hr. By audition only. May be repeated.
- 688. University Singers. 1 hr. May be repeated
- 689. Chamber Singers. 1 hr. May be repeated.
- 690. Opera Theatre. 1 hr. May be repeated.
- 691, 692, 693, 694, +695. Advanced Composition. 1-3 hrs.
- 701, 702. Piano. 1-4 hrs.
- 704, 705. Harpsichord. 1-4 hrs.
- 711, 712, Organ, 1-4 hrs.
- 714, 715. Flute. 1-4 hrs.
- 717, 718, Oboe, 1-4 hrs.
- 720, 721. Clarinet, 1-4 hrs.

- 723, 724. Saxophone. 1-4 hrs.
- 726, 727. Bassoon, 1-4 hrs.
- 729, 730. Horn, 1-4 hrs.
- 732, 733. Trumpet. 1-4 hrs.
- 735, 736. Trombone. 1-4 hrs.
- 738, 739. Euphonium. 1-4 hrs.
- 741, 742, **Tuba.** 1-4 hrs.
- 744, 745. Violin. 1-4 hrs.
- 747, 748. Viola. 1-4 hrs.
- 750, 751. Cello. 1-4 hrs.
- 753, 754. String Bass. 1-4 hrs.
- 756, 757. **Percussion.** 1-4 hrs.
- 761, 762. Voice. 1-4 hrs.
- 764, 765. Harp. 1-4 hrs.
- 767, 768. Guitar. 1-4 hrs.
- 791, 792, 793. Composition. 1-3 hrs.
- 801, 802. Piano. 1-4 hrs.
- 804, 805. Harpsichord. 1-4 hrs.
- 811, 812. Organ. 1-4 hrs.
- 814, 815. **Flute.** 1-4 hrs.
- 817, 818. **Oboe.** 1-4 hrs.
- 820, 821. Clarinet. 1-4 hrs.
- 823, 824. Saxophone. 1-4 hrs.
- 826, 827. Bassoon. 1-4 hrs.
- 829, 830. **Horn.** 1-4 hrs.
- 832, 833. Trumpet. 1-4 hrs.
- 835, 836. **Trombone.** 1-4 hrs.
- 838, 839. **Euphonium.** 1-4 hrs.
- 841, 842, **Tuba.** 1-4 hrs.
- 844, 845, Violin, 1-4 hrs.
- 847, 848. Viola. 1-4 hrs.
- 850, 851. Cello. 1-4 hrs.
- 853, 854. String Bass. 1-4 hrs.
- 856, 857. **Percussion.** 1-4 hrs.
- 861, 862. Voice, 1-4 hrs.
- 864, 865. Harp, 1-4 hrs.
- 891, 892., 893 Composition. 1-3 hrs.

# **NURSING (NSG-075)**

- 519. The Computer as a Nursing Tool. 3 hrs. Exposure to the computer and examination of nursing applications.
- 522. Professional Collaboration for Developmental Disability Services. 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.
- 536. **Hospice: Concept and Application.** 3 hrs. Explores concept and operationalization with emphasis on legislation, funding, referrals, advocacy.
- 537. **Abusive Behavior:** An Exploration. An inter-disciplinary exploration of abusive behavior across the life span.

- 538. **Health Care Financing.** 3 hrs. Survey of health economics, finance theory, cost control, prospective reimbursement, and trends.
- 578. Specialized Studies in Developmental Disabilities. 1-6 hrs. Specialized study and skill acquisition in the area of developmental disabilities. Topics vary.
- 589. Caribbean Studies: Health Care Delivery Systems. 3 hrs. The course examines major issues relevant to the health care delivery system in the West Indies. The students will assess the level of health care delivery among various populations and groups.
- 591. Austrian Studies: Variable Topics. 3 hrs.
- 593. **Health Care of the Elderly in England.** 3 hrs. Resources for the elderly in U.S. and Great Britain. Attitudes and perceptions of elderly by British health care providers.
- 594. **Health Care in England.** 3 hrs. Comparison of health care system in United states and England. Philosophies of health and nursing in a community are explored.
- 595. Management and Economics of Health Care. 3 or 6 hrs. United States and British health system, financing, administration, and nursing management.
- 596. **Nursing: The British Heritage.** 3 or 6 hrs. Evolvement of modern nursing in England within the context of international, social, economic, and political events.
- 597. Emergency Nursing: A British View. 3 or 6 hrs. Introduction to the British health system and roles assumed by British emergency nurses.
- 598. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.
- 599. British Studies: Hospice. 3 hrs. Introduction to hospice concept and symptom control in special units, hospitals, and homes in the United Kingdom.
- 600. Issues in Nursing and Health Care. 3 hr. Seminar in contemporary problems and trends in nursing and health care.
- 601. Theory Development in Nursing. 3 hrs. Concepts, models, and theories relevant to nursing practice, education, and research.
- 603. Nursing Research. 3 hrs. Prerequisite: Introductory course in statistics. Prerequisite or concurrent: NSG 601, and first course in major. Elements of the research process leading to the development of a proposal.
- 606. **Death and Bereavement.** 3 hrs. An examination of research and theory related to death and bereavement.
- 607. Planning and Public Policy Formation for Health. 3 hrs. Permission of instructor. An examination of issues in health/social planning and public policy at local, state, and national levels.
- 611. Curriculum and Teaching in Nursing. 3 hrs. Prerequisite or concurrent: NSG 601. Curriculum development, selection, design, and evaluation of instructional systems for the teaching of nursing.
- 612. Concepts of Organizational Behavior in Nursing. 3 hrs. Prerequisite or concurrent: NSG 601. Theories and research related to organizational behavior in the administration of nursing services.
- 613. Clinical Specialist in Nursing. 3 hrs. Prerequisite: NSG 621, NSG 631 or permission of instructor. Seminar focused on theory and research pertaining to the clinical major for practice of clinical nurse specialists.
- 614-L. **Practice of Clinical Nurse Specialization.** 6 hrs. Prerequisite: NSG 613 and permission of instructor. Seminar and advanced practicum in area of nursing specialization as identified by clinical major.
- 618. **The Nurse Administrator.** 3 hrs. Prerequisites: NSG 603, 612. Concurrent: NSG 618-L. Seminar. Analysis of the role of the nurse administrator related to the department of nursing.
- 618-L. Role Practicum. 3 hrs. Concurrent: NSG 618. Application of role theory related to a department of nursing.
- 619. **Fiscal Management for Nurses.** 3 hrs. Fiscal responsibility, utilization of financial management principles, techniques and cost control measures in nursing administration.
- 621. Concepts and Theories for Community Health Nursing. 3 hrs. Prerequisites or concurrent: NSG 601 or permission of instructor. An analysis of concepts, theories, and research relevant to community health nursing.
- 622. Seminar in Community Health Nursing. 3 hrs. Prerequisite: NSG 621; Concurrent: NSG 622-L. Assessment of communities and design of programs of community health nursing for specific populations. The epidemiological and health planning processes are included.

- 622-L. Community Health Nursing Practicum. 3 hrs. Concurrent NSG 622. Prerequisite: NSG 621. As minor: 3 hrs. Prerequisite: role cognate. As Major: 3 hrs. Prerequisite: role cognate. Implementation and evaluation of community health nursing programs for specific populations.
- 623. U.S. and World Community Health Nursing Issues. 3 hrs. Prerequisites: NSG 622; NSG 603. Concurrent NSG 623-L. Analysis of organizations and resources affecting health care and policy setting relevant to the practice of community health nursing.
- 623-L. U.S. and World Community Health Nursing Practicum. 3 hrs. Concurrent: NSG 623. Synthesis and application of theories, and research, affecting health care, health planning, and policy setting.
- 631. **Theories for Psychiatric Mental Health Nursing.** 3 hrs. Prerequisite or concurrent: NSG 601. Analysis of theories and research relevant to mental health nursing.
- 632. **Psychiatric Nursing with Groups.** 3 hrs. Prerequisite: NSG 631. Concurrent: NSG 632-L. Theoretical design and evaluation of psychiatric nursing systems in the assessment and treatment of individuals in the group setting.
- 632-L. Psychiatric Nursing Practicum. 6 hrs. Concurrent: NSG 632. Design, implementation, and evaluation of nursing systems for individuals, families, and group. May be repeated for a total of five hours.
- 633. **Psychiatric Nursing of Families.** 3 hrs. Prerequisite: NSG 631. Concurrent: NSG 632-L. Theory based design and evaluation of nursing interventions in marriage/ family dysfunction.
- 640. Advanced Adult Health Nursing. 3 hrs. Prerequisite NSG 601. Corequisite NSG 640-L. Theories and research related to adult health nursing practice.
- 640-L. Advanced Adult Health Nursing Practicum. 3 hrs. Prerequisite NSG 601. Corequisite NSG 640. Advanced practice in area of Adult Health specialization.
- 641. Advanced Adult Health Nursing. 3 hrs. Prerequisite NSG 640. Corequisite NSG 641-L. Advanced theories and research related to adult health nursing practice.
- 641-L. Advanced Adult Health Nursing Practicum. 3 hrs. Prerequisite NSG 640. Corequisite NSG 641. Advanced practice in area of Adult Health specialization.
- 646. Advanced pharmacotherapeutics. 3 hrs. Prerequisite NSG 601 or permission of instructor. Pharmacological actions of medications based on drug classifications and therapeutic response of clients to drug intervention by nurses.
- 647. Advanced Pathophysiology. 3 hrs. Prerequisite NSG 601 or permission of instructor. Adaptations and alterations in body systems to multi system trauma/illness and stressors. Analyze pathophysiologic states in response to body system alterations and nursing interventions based on adaptation theory.
- 648. Advanced Practice in FNP. 2 hrs. Prerequisite NSG 601, NSG 646, NSG 647. Corequisite NSG 648-L. Exploration of the role of the Advanced Practice Nurse with an emphasis on family theory and primary care concepts.
- 648-L. Advanced Practice in FNP Practicum. 1 hrs. Prerequisite NSG 601, NSG 646, NSG 647. Corequisite NSG 648. Clinical opportunity to practice advanced nursing health assessment.
- 660. Marriage and Family Studies. 3 hrs. Prerequisite: Permission of instructor. Analysis and conceptualization of family structure and process utilizing systems theory and related research findings.
- 661. Family Nurse Practitioner I. 3 hrs. Prerequisite NSG 601, NSG 646, NSG 647. Corequisite NSG 661-L. Theory and research of the role of the nurse as a primary care provider with emphasis on management of individuals.
- 661-L. Family Nurse Practitioner I Practicum. 3 hrs. Prerequisite NSG 601, NSG 646, NSG 647. Corequisite NSG 661. Clinical opportunities to examine the role of the nurse as a primary care provider with emphasis on management of individuals.
- 662. Family Nurse Practitioner II. 3 hrs. Prerequisite NSG 661. Corequisite NSG 662-L. Theory and research of the role of the nurse as a primary care provider with emphasis on management of families.
- 662-L. Family Nurse Practitioner II. 3 hrs. Prerequisite NSG 661. Corequisite NSG 662. Clinical opportunities to examine the role of the nurse as a primary care provider with emphasis on management of families.
- 663. Family Nurse Practitioner III. 3 hrs. Prerequisite NSG 662. Corequisite NSG 663-L. Theory and research of the role of the nurse as a primary care provider with emphasis on the professional perspective of advanced nursing practice.

- 663-L. Family Nurse Practitioner III. 3 hrs. Prerequisite NSG 662. Corequisite NSG 663. Clinical opportunities to examine and practice the advanced role of the Family Nurse Practitioner with a professional perspective of advanced nursing practice.
- 677. Assessment and Intervention for Handicapped Children 0-5. 3 hrs. Current issues and theories regarding assessment and intervention procedures for at-risk and handicapped young children, birth through 5.
- 678. Role in Teaching, 3 hrs. Prerequisite: NSG 611; prerequisite or concurrent: role elective. Role, change, and conflict theory; evaluation; legal aspects; university governance; student/faculty relations.
- 678-L. **Teaching Practicum.** 3 hrs. Concurrent: NSG 678. Application of theories in classroom/clinical teaching; evaluation process; and faculty role in schools of nursing.
- 679-L. **Nursing Administration Practicum.** 3 hrs. Required for majors. Prerequisites: NSG 618, 619. Clinical applications relative to the role of the nurse administrator with multi-disciplinary interaction.
- 688. Medical Aspects of Developmental Disabilities. 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.
- 691. Research. 1-3 hrs. Prerequisite: Graduate research course and approval of instructor. Student selects an area of interest in nursing for study. May repeat.
- 692. Special Problems. 1-3 hrs. Prerequisite: Approval of instructor. Student selects an area of interest in nursing for study. May repeat.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of six hours. Prerequisites: NSG 603, 612, or 621 or 631. Credit deferred until thesis completed.

# PHILOSOPHY (PHI-284)

- 506. **Philosophy of Man.** 3 hrs. Philosophical consideration of the nature of man including topics in philosophical anthropology and philosophy of mind.
- 510. Classical Philosophy. 3 hrs. An outline survey of Greek philosophical thought.
- 512. Modern Philosophy. 3 hrs. Survey of 17th and 18th century European philosophy.
- 536. Aesthetics. 3 hrs. Philosophical analysis of theories of art and beauty.
- 540. American Philosophy. 3 hrs. Survey of the development of philosophy in America and major American philosophers.
- 550. **Existentialism and Phenomenology.** 3 hrs. An examination of the central themes in contemporary European existentialism and phenomenology.
- 551. **Political Philosophy.** 3 hrs. The major schools of political philosophy from classical to contemporary times.
- 552. Medical Ethics. 3 hrs. An examination of various conceptual and ethical issues in the health care professions.
- 553. Philosophy of Law. 3 hrs. An inquiry into theories of law.
- 557. **Environmental Ethics.** 3 hrs. An examination of human responsibilities for nature; the impact of civilization on the natural world; formulation of ethical principles and policies.
- 558. Symbolic Logic. 3 hrs. The basic theory and operations of the sentential calculus, quantification, and the logic of relations.
- 560. **20th-Century Philosophical Issues.** 3 hrs. An examination of the central themes in contemporary British-American analytic philosophy.
- 592. **Special Problems.** 3 hrs. A problem study to be approved by the department chair. May be taken for a total of nine hours.
- 599. **British Studies: Philosophy.** 3-6 hrs. An introduction to the language and techniques of philosophy relevant to practical critical problems.
- 610. Philosophy of Religion. 3 hrs. Seminar topics in philosophical theology.

- 620. **Seminar in Metaphysics.** 3 hrs. Classical and contemporary metaphysics will be examined. Modern criticism by logicians, analytic philosophers, and philosophers of science will be presented.
- 625. **Seminar in Modern Philosophy.** 3 hrs. A critical investigation of the writings of selected modern and contemporary philosophers.
- 630. Seminar in Epistemology. 3 hrs. Advanced study of issues concerning the theory of knowledge.
- 635. Ethics. 3 hrs. An advanced study of issues and problem in moral philosophy.
- 636. Major Philosopher. 3 hrs. An advanced study of the contributions of a selected philosopher.
- 640. **Major Issues in Philosophy.** 3-6 hrs. This course focuses on one or more major issues in philosophy in one or more historical periods of philosophy. The student may repeat this course one time if the course involves a different major issue.
- 656. **Philosophy of Science.** 3 hrs. The conditions and status of knowledge, perception, measurement, hypothesis and casuality.
- 681. Departmental Seminar. 1 hr. Repeatable up to a total of three semester credit hours.
- 691. **Research in Philosophy.** 1-16 hrs. With the approval of the department and under the guidance of the student's major professor, the student will begun research on his/her master's thesis.
- 692. Special Problems. 1-6 hrs. A problem study to be approved by the department chairman.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

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- 698. Thesis. 1-6 hrs. for a total of 6 hrs.

### PHYSICS (PHY-360)

- 551. Physical Applications of the Fourier Transform. 3 hrs. Prerequisites: PHY 202 and MAT 280. The continuous Fourier transform and its symmetries together with its roles concerning measuring devices.
- 555. **Fluid Dynamics.** 3 hrs. Prerequisites: PHY 350, MAT 385. A mathematical development of the physical principles governing fluid flow.
- 564. Fundamentals of Solid State Physics. 3 hrs. Prerequisite: Permission. The basic physical processes which occur in solids and semiconductors.
- 565. Nuclear Physics. 3 hrs. Prerequisite: PHY 361. Nuclear binding forces, chain reaction, and the non-steady state reactor, radiation detection.
- 571. **Physical Marine Science.** 3 hrs. Prerequisites: PHY 112 or 202 and MAT 179. A core requirement in the marine science program. Covers the major physical properties and processes of marine waters.
- +571-L. Physical Marine Science Laboratory. 1 hr. Corequisite: PHY 571 or MAR 561. Experiments to support PHY 571 or MAR 561 include sampling, instrument calibrations, wave refraction, reflection and diffraction. A one-day field trip is scheduled.
- 585. **History and Literature of Physics.** 3 hrs. A survey of the history of physics from ancient times, stressing the rise and fall of concepts.
- 601. **Mechanics**. 3 hrs. Prerequisite: Permission. A formal mathematical development of graduate level mechanics.
- 602. **Electricity and Magnetism.** 3 hrs. Prerequisite: Permission. A formal mathematical development of graduate level electricity and magnetism.
- 603. **Statistical Physics.** 3 hrs. A review of thermodynamics, equilibrium, ensembles and processes, phase transitions and critical phenomena, computational and approximation methods.
- 604. **Physics for High School Teachers.** 3 hrs. Prerequisite: Permission. Principles of physics designed to up-date the teacher's effectiveness in teaching physics.

- 605. Special Topics in Theoretical or Experimental Physics. 3 hrs. Prerequisite: Permission. Subjects depend upon current interest of students and staff.
- 606. **Methods of Mathematical Physics.** 3 hrs. Permission. The application of advanced mathematical methods to the study of various physical systems.
- 610. Astronomy for Teachers. 3 hrs. Prerequisite: Permission. Solar-system and stellar astronomy.
- 640. Electron Optics and Its Applications. 3 hrs. Prerequisite: Permission. Electrostatic and magnetic lenses, electron microscopes.
- 650. **Quantum Mechanics I.** 3 hrs. Prerequisite: Permission. The Schroedinger equation, operators and eigenfunctions, spherically symmetric systems.
- 651. Quantum Mechanics II. 3 hrs. Prerequisite: Permission. Scattering theory, matrix mechanics, angular momentum, perturbation theory.
- 689. Seminar I. 1 hr. Prerequisite: Permission. Study of current literature in physics supplemented by laboratory research.
- 689. Seminar II. 1 hr. Prerequisite: Permission. Study of current literature in physics supplemented by laboratory research.
- 689. Seminar III. 1 hr. Prerequisite: Permission. Study of current literature in physics supplemented by laboratory research.
- 689. Seminar IV. 1 hr. Prerequisite: Permission. Study of current literature in physics supplemented by laboratory research.
- 691. Research in Physics. 1-16 hrs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

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- 698. Thesis. 1-6 hrs. for a total of 6 hours.

# PLANNING (PLG-260)

- 550. Grantsmanship. 3 hrs. Identification and analysis of funding programs supporting community and regional development. Exercises in grant writing and management.
- 561. Socioeconomic Planning. 3 hrs. Compilation, analysis, and projection of population and economic variables as they related to community and regional planning.
- 562. Environmental Planning. 3 hrs. A detailed study of environmental planning analysis and methodology as an element in land-use decision-making systems.
- 563. **Planning Methods.** 3 hrs. An introduction to basic methods and techniques used in planning and policy analysis.
- 564. Community Infrastructure. 3 hrs. Examination and analysis of housing, transportation, and community facilities planning, development, and operations.
- 565. Land Use Planning and Policy. 3 hrs. Consideration of various legal and institutional tools related to implementation of community and regional plans.
- 566. Planning Agency Management. 3 hrs. An analysis of the management and operation procedures of community and regional planning organizations.
- 569. Studio Laboratory: Plan Preparation. 3 hrs. Preparation and presentation of a professional plan as a collaborative student/community effort. May be repeated with change of content for a total of six (6) hours.
- 570. **Planning Theory and Practice.** 3 hrs. A study of the development of planning theory and practice and the contributions various professions and academic disciplines have made to the planning profession.
- 599. Comparative Urban Planning. 3-6 hrs. This course focuses on urban planning and the development of the urban landscape in the British Isles. Includes lectures, field trips and directed research.
- 662. Seminar in Environmental Planning. 3 hrs. Prerequisite: PLG 462/562 or approval of instructor.
- 665. Seminar in Community and Regional Planning. 3 hrs. An overview of the development and fundamentals of community and regional planning.

- 667. Development Dispute Resolution. 3 hrs. Examines contemporary methods used to resolve urban development disputes.
- 668. The Context of Public Planning. 3 hrs. An examination of the political, social, economic and organizational context of public planning.
- 669. Site Planning and Development. 3 hrs. A study of design, financing, permitting and scheduling of large scale developments.
- 691. Internship. 1-9 hrs. May be repeated for a total of nine hours.
- 692. Special Problems. 1-6 hrs.
- 697. Independent Study and Research. Arr. Not to be counted as credit toward a degree. Students who are not in residence but are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.
- 698. Thesis. 1-6 hrs. for a total of 6 hours.

# **POLITICAL SCIENCE (PS-280)**

- 501. Political Socialization. 3 hrs. An analysis of the American political system on an advanced level.
- 502. Urban Politics. 3 hrs.
- 504. The Legislative Process. 3 hrs.
- 505. Women and Politics. 3 hrs. An examination of the women's movement, women in political theory with an emphasis on democratic theory, women and the law and modern feminist thought.
- 506. Political Parties. 3 hrs.
- 507. Mississippi Government. 3 hrs.
- 508. The American Presidency. 3 hrs. An analysis of the selection, role, power, and performance of the presidency.
- 509. Southern Politics. 3 hrs. An examination of the politics and political culture of the southern states.
- 520. Political Theory to Locke. 3 hrs.
- 521. Political Theory Locke to Present. 3 hrs.
- 525. American Political Theory. 3 hrs.
- 531. International Law and Organization. 3 hrs.
- 532. Foreign Policies of the Major Powers. 3 hrs.
- 535. Comparative Foreign Policy. 3 hrs.
- 550. Comparative Studies in European Politics. 3 hrs.
- 551. Soviet Government and Politics, 3 hrs.
- 552. The Political Systems of Great Britain and the Commonwealth. 3 hrs.
- 556. Latin American Governments and Politics. 3 hrs.
- 557. Political Development. 3 hrs. A comparative analysis of political change and modernization.
- 558. Latin American Political and Economic Development. 3 hrs.
- 571. Public Personnel Administration. 3 hrs.
- 572. Organization and Management. 3 hrs.
- 573. Public Policy. 3 hrs.
- 574. Government Budgetary Process. 3 hrs. Facets of budgetary administration, emphasizing federal and municipal budgets, theory and process.
- 580. United States Constitutional Law. 3 hrs.
- 581. The American Judicial Process. 3 hrs.
- 584. Administrative Law. 3 hrs. An introduction to the field of administrative law including the analysis of substantive law which administrative agencies produce as well as the body of requirements that control administrative activities and processes.
- 585. International Law. 3 hrs.
- 588. Jurisprudence. 3 hrs.
- 589. U.S. Supreme Court and Civil Liberties. 3 hrs. An analysis of the role of the U.S. Supreme Court in protecting individual rights. Primary focus is on litigation involving provisions of the Bill of Rights.

- 597. **Government-Business Relations in Japan.** 3 hrs. An on-site analysis of business and government linkage in Japan offered under the auspices of the Center for International Education.
- 599. Seminar in British Politics. 3-6 hrs. A seminar conducted in Great Britain under the auspices of the Anglo-American Institute.
- 691. Research in Political Science. 1-16 hrs.
- 692. Special Problems. 1-3 hrs. arr. The student works individually on a paper in political science under the supervision of a graduate faculty member.
- 693. Internship in Political Science. Hrs. arr. Departmental approval required. Student will work with an employer acting in the public sector in order to form practical experience in political and public affairs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs.
- 700. Seminar in U.S. Government. 3 hrs. May be taken twice for credit. Prerequisite: Course in American national, state, and local government or consent of instructor.
- 720. **Scope and Methods.** 3 hrs. A survey of the scope of political science and of the tools and methods utilized in the discipline.
- 721. Seminar in Political Theory. 3 hrs. May be taken twice for credit.
- 730. Seminar in U.S. Foreign Relations. 3 hrs. May be taken twice for credit. Prerequisite: Another course in U.S. foreign policy or history of U.S. foreign policy or permission of instructor. A survey of current United State foreign policies and problems.
- 731. **Seminar in International Relations.** 3 hrs. May be taken twice for credit. An intensive survey and analysis of the methodology, literature, and substance of the process of trans-state politics.
- 750. Seminar in Comparative Government and Politics. 3 hrs. May be taken twice for credit. Prerequisite:

  One or more courses in comparative government or permission of the instructor. A research-type course in which each student will make an intensive study of the political institutions of one country, or of a group of countries having similar governments.
- 770. Seminar in Public Administration. 3 hrs. May be taken twice for credit.
- 781. Seminar in Public Law. 3 hrs. May be taken twice for credit. Prerequisite: A course in constitutional law or consent of the instructor. A research course in which the students examine in depth various aspects of the judicial system and its relationship to other elements in the political process.
- 792. Special Problems. 1-3 hrs.
- 799. British Studies: Advanced Seminar in British Politics. 3-6 hrs. Lecture Series and research in British politics offered abroad under the auspices of the Institute of Anglo-American studies.
- 898. Dissertation. 12 hrs.

# POLYMER SCIENCE (PSC-370) (Please see FORENSIC SCIENCE-FSC-375)

- 570. Surface Coatings. 4 hrs. Study of the physical and chemical properties of the pigments, binders, solvents, and additives employed in surface coatings formulations, paint formulation, dispersion techniques, surface preparation, paint testing, non-polluting application techniques, and surface coatings formulations analysis.
- +570-L. Laboratory for PSC 570. 1 hr.
- 691. Research in Polymer Science. 1-16 hrs.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.

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- 698. Thesis. 1-6 hrs. for a total of 6 hrs.

- 701. Organic Polymer Chemistry I. 3 hrs. Reaction mechanisms, polymer concepts, step-growth polymerization, and polymer reactivity.
- 702. **Organic Polymer Chemistry II.** 3 hrs. Kinetics, free radical reaction mechanisms, homogeneous chain growth polymerization of vinyl compounds, copolymerization, and degradation of polymers.
- 703. Organic Polymer Chemistry III. 3 hrs. Methods of studying stereochemistry of polymers, anionic and cationic polymerization, and polymerization via homo- and heterogeneous catalysis.
- 710. **Polymer Physical Chemistry I.** 3 hrs. A study of polymer chain conformation, solution thermodynamics, phase equilibria, and transport phenomena.
- 711. Polymer Physical Chemistry II. 3 hrs. Polymer characterization to include light scattering, end group analysis, osmometry, fractionation, viscometry, gel permeation chromatography, and molecular weight distributions.
- 712. **Polymer Physical Chemistry III.** Solid State. 3 hrs. Morphology, crystallization, entropyelasticity, viscoelasticity, glass transition, interfaces of polymers.
- +720, 721. **Polymer Techniques I, II.** 2 hrs., 2 hrs. Laboratory methods of polymer synthesis, structural determination, and characterization.
- 730. Polymer Rheology. 2 hrs. The elastic and viscosity properties of polymer solutions and melts will be studied from a molecular and engineering perspective.
- 740. Polymer Kinetics. 2 hrs. Introduction to polymerization kinetics.
- 780, 781. **Selected Topics.** 3 hrs., 3 hrs. To include a survey of such topics as thermally stable polymers, silicone elastomers, emulsion polymers, controlled biocide release from polymers and water-soluble high molecular weight polymers.
- 789. Polymer Science Seminar. 1-4 hrs.
- 791. Research. Hrs. arr. 1-16 hrs.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 801. **Structure and Elasticity of Polymer Networks.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Study of the structure, elasticity and mechanical properties of polymer networks.
- 803. **Block and Graft Copolymers.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Study of structure, synthetic methods and properties of block, random and graft copolymers.
- 804. Naturally Occurring Polymers. 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Study of the structure-property relationships of naturally occurring polymers, including polysaccharides, proteins, and nucleic acids.
- 805. Surface Coatings. 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Scientific principles underlying surface coatings science are studied in depth.
- 806. **Industrial Monomer and Polymer Science.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Industrial monomer and polymer science.
- 807. **Testing of Polymers.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Testing of polymers: adhesives, coatings, fibers, plastics, and elastomers.
- 808. **Polymer Processing Principles.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Quantitative descriptions of extrusion, injection molding, rotational molding.
- 809. Morphology of Oriented Polymers. 2 hrs. Prerequisites: PSC 710, 712. Advanced polymer morphology.
- 810. Physical Properties of Macromolecular Solids. 2 hrs. Prerequisites: PSC 710 and 711, or permission of instructor. Advanced study of glassy and crystalline physical state of macromolecular solids emphasizing the influence of morphological structure.
- 811. Polymer Physics. 2 hrs. Prerequisites: PSC 710 and 711 or permission. Advanced study of polymer conformation, phenomenological and molecular theories of polymer relaxation, diffusion in polymers.
- 812. Conformational Analysis, Molecular Design of Polymers. 2 hrs. Prerequisites: PSC 710, 711, 712. Study of molecular interactions that control polymer conformation. Molecular modeling in material design.

# **PSYCHOLOGY (PSY-175)**

- 511. Psychological Testing and Assessment. 3 hrs. Prerequisite: PSY 110 and 360 or equivalent. Introduction to theory and techniques of psychological testing and assessment.
- 513. Multicultural Counseling. 3 hrs. Examines cultural diversity in North American society with focus on implications for mental health service providers.
- 518. History and Systems of Psychology. 3 hrs. Prerequisite: Permission of instructor. Review of the history of psychology and intensive study of current systems of psychology.
- 520. **Sensation and Perception.** 3 hrs. Prerequisite: PSY 320. A survey of sensory and perceptual processes with emphasis on the visual system.
- 522. Psychology of Learning. 3 hrs. Prerequisite: PSY 320. Basic problems, theories, and research in the areas of human and animal learning.
- 523. **Group Procedures.** 3 hrs. The study of behavior in group settings with particular attention given to applications in mental health agencies and institutions.
- 524. **Animal Behavior.** 3 hrs. Prerequisites: PSY 320. The study of animal behavior with special emphasis on the comparison of psychological processes along the phylogenetic scale.
- 526. Physiological Psychology. 3 hrs. Prerequisite: PSY 110. Relationship between physiological functions and behavior.
- 532. Behavioral Interventions. 3 hrs. An introduction to behavioral interventions as applied to normal and deviant behavior across different environmental settings.
- 533. Workshop in Psychology. 3 hrs. Topical workshops related to selected aspects of counseling and psychological practice in educational and/or human service settings.
- 536. Abnormal Psychology. 3 hrs. Prerequisite: Permission of the instructor. Study of the major psychoses, and psychoneuroses, and mental deficiency.
- 550. **Social Psychology.** 3 hrs. Prerequisite: PSY 110. Study of the individual in group situations, and the influence of the social environment on his behavior and development.
- Industrial Psychology. 3 hrs. Prerequisite: PSY 110. Applications of psychological principles and methods to problems of industry.
- 555. **Psychology of Personality.** 3 hrs. A study of the factors involved in the development of the mature personality.
- 556. Psychology of Aging and Death. 3 hrs. Study of problems and attitudes concerning aging and death.
- 557. Psychology of Religion. 3 hrs. Prerequisite: PSY 110. An examination of modern psychological perspectives on religious beliefs, experiences, and practices.
- 578. Specialized Studies in Developmental Disabilities. 1-6 hrs. Specialized study and skill acquisition in the area of developmental disabilities. Topics vary.
- 582. Moral Value Development in Childhood and Adolescence. 3 hrs. A study of the major theories of moral development and techniques for facilitating moral growth.
- 596. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.
- 597. Professional Collaboration for Developmental Disability Services. 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.
- 599. **British Studies.** 3-6 hrs. Lecture and research on variable topics. Offered in Great Britain through the USM College of International and Continuing Education.
- 607. Professional Ethics and Standards in Psychology. 1 hr. Permission of Instructor. Professional ethics and guidelines for teaching, research, and practice with special attention given to the American Psychological Association's Ethical Principles of Psychologists and Code of Conduct.
- 608. Professional Issues in Psychology. 1 hr. Permission of Instructor. An examination of current trends and issues in the field of professional psychology.
- 609. Contemporary Topics in Psychology. 3 hrs. May be repeated up to 12 hrs.
- 610. Foundations, Organization, and Administration of Guidance. 3 hrs. An introduction to counseling and guidance services at the elementary/secondary school levels. Attention is given to both the range of services typically offered and to principles for organizing and administering a program of guidance services.

- 611. Career Development and Information Services. 3 hrs. The introduction to theories of career development and an analysis of the world of work. Processes are identified through which occupational/educational and personal/social information may be integrated for career/life planning.
- 612. Counseling Theories I. 3 hrs. A course which provides an overview of major theoretical models for counseling. Attention is given to philosophical assumptions, key theoretical concepts, and major techniques of each.
- 613. Cultural Bases of Behavior. 3 hrs. A foundations course designed to develop an understanding of and respect for cultural and individual differences. Generalizations will be made to psychological research and practice.
- 614. Testing and Individual Analysis. 3 hrs. Prerequisite: REF 602 or equivalent. The fundamental principles of psychological assessment including concepts necessary for the administration, scoring, interpretation and use of test results. Attention is also given to ethics and issues involved in the appropriate use of psychological test results.
- 615. Professional Seminar in Industrial/Organizational Psychology I, II, III, IV. 1 hr. each. Limit of 6 hrs. Prerequisite: Admission to the I/O program or permission of instructor. An examination of current topics in the professional practice of industrial/ organizational psychology.
- 616. Proseminar in Clinical Psychology. 1 hr. Prerequisite: Admission to the clinical training program. An overview of contemporary clinical psychology and an introduction to the scientist/ practitioner model at USM.
- 621. **Theories of Learning.** 3 hrs. Basic concepts, problems, and research methodology in the studying of learning and motivation.
- 624. **Physiological Psychology.** 3 hrs. Study of neurophysiological mechanisms in behavior and related problems.
- 630. Introduction to Counseling in the Community. 3 hrs. An introductory course that includes such topics as: history of counseling as a professional field; counseling professional organizations, accreditation, and credentialing; ethical and legal principles; and introduction to the community environment.
- 635. **Personality.** 3 hrs. Consideration of the major theories of personality, and research on the development and measurement of personality.
- 639. Student Personnel Work in Higher Education. 3 hrs. An introduction to student development services in higher education.
- 640. Clinical Assessment I. 3 hrs. Prerequisites: Admission to the clinical psychology training program and permission of instructor. Theory, administration, and interpretation logic of clinical assessment (intellectual, behavioral, social) from infancy to early childhood.
- 641. Clinical Assessment II. 3 hrs. Prerequisites: PSY 640 and permission of instructor. Clinical assessment techniques (psychometric and behavioral) from childhood through adulthood. Experience includes clinical assessments.
- 642. Psychoeducational Assessment I. 3 hrs. each. Prerequisite: Permission of instructor. Theory and practice of psychoeducational assessment including individual intelligence testing; multicultural issues.
- 643. **Psychoeducational Assessment II.** 3 hrs. Prerequisite: PSY 642 or permission of instructor. A study of the various psychological tests used in the appraisal and evaluation of exceptional children.
- 652. Counseling Psychology Practicum I. 3 hrs. Prerequisites: PSY 612, 614, and prior arrangement with instructor. Beginning clinic practicum in counseling and psychological services. Students are expected to acquire basic competencies in counseling, testing and implementation of a systematic plan for behavior change.
- 653. Supervised Field Practicum. 3-6 hrs. Prerequisites: CPY 652 and permission of instructor. A field practicum for students enrolled in the Counseling and Personnel Services program. Students may repeat for a maximum of 9 hours credit.
- 659. Research Design. 3 hrs. Prerequisite: Introductory statistics. An overview of research design and methodology with an emphasis on problems in applied settings.
- 660. Advanced Data Analysis. 3 hrs. Critical evaluation of a variety of analytic techniques.
- 661. **Research Evaluation in the Behavioral Sciences.** 3 hrs. Seeks to develop skill in evaluating the methodological soundness and usefulness of behavioral science research.
- 662. Correlational Methods. 3 hrs. Prerequisite: PSY 360 or permission of instructor. Theory and application of probability, Chi Square, simple and multiple correlation and regression, reliability, validity, and cross validation.

- 663. Analysis of Variance. 3 hrs. Prerequisite: PSY 660 or permission of instructor. Concepts of measurement, sampling, variability, hypothesis testing, and power as applied to analysis of variance and covariance, including repeated measures.
- 670. Advanced Educational Psychology. 3 hrs. Theory and data bases relating to the contributions of psychology to the schooling process.
- 671. Seminar in School Psychology. 3 hrs. May be repeated to limit of 6 hrs. Prerequisite: Admission to the school psychology training program or permission of instructor. Professional issues and standards; prepracticum training and experience.
- 672. **Social Processes in Classroom Learning**. 3 hrs. Pupil-teacher interaction; instruction in developing goals, changing attitudes, resolving conflicts, and enhancing the individual's sense of worth.
- 674. Advanced Child Psychology. 3 hrs. Mental, motor, social, and emotional development of children of elementary school age.
- 675. Advanced Adolescent Psychology. 3 hrs. Advanced study of the adolescent and his or her needs in the home, school, and community.
- 676. **Psychology of Mental Retardation.** 3 hrs. Prerequisite: Permission of instructor. Study of personality development, problems of adjustment, and abnormal behavior of the mentally retarded.
- 677. Assessment and Intervention for Handicapped Children 0-5. 3 hrs. Current issues and theories regarding assessment and intervention procedures for at-risk and handicapped young children, birth through 5.
- 679. Advanced Developmental Psychology. 3 hrs. Principles of psychological development across the life span.
- 688. **Medical Aspects of Developmental Disabilities.** 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.
- 691. Research in Psychology. 1-16 hrs.
- 692. Special Problems I, II, III. 1-3 hr. By prior arrangement only.
- 693. Research in School Psychology I, II. 1 hr. each. Prerequisite: Admission to the school psychology training program. Introduction to scientific inquiry in school psychology.
- 694. Field Problems I, II, III. 1-3 hrs. By prior arrangement only.
- 697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.
- 699. British Studies: Research in Psychology. 3 hrs.
- 701. **Seminar in Teaching of Psychology.** 1 hr. An analysis of the psychoeducational problems involved in the undergraduate and graduate teaching of psychology.
- 702. Practicum in Teaching Psychology. 3-6 hrs. Supervised teaching of courses in psychology.
- 710. Group Counseling and Psychotherapy. 3 hrs. Introduction to theory and practice of group counseling and psychotherapy. Requires participation in experimental quasi-group. Major theoretical models for group work are surveyed.
- 711. **Theory and Practice of Consultation.** 3 hrs. Introduction to the theory and process of consultation. Emphasis is placed on student acquisition of basic consulting skills/competencies.
- 712. Assessment and Diagnosis. 3 hrs. Prerequisite: PSY 614 or equivalent. An advanced course in psychological assessment and diagnosis. Attention is given to the selection and use of instruments commonly employed by counseling psychologists in clinical settings, and to diagnostic criteria of the DSM-III-R.
- 713. Counseling Theories II. 3 hrs. Prerequisite: PSY 612 or equivalent. An intermediate level course which provides a systematic analysis of major counseling theories with an emphasis on the integration of theoretical constructs with practice and contemporary research.
- 714. The Psychology of Vocational Development. 3 hrs. An advanced study of vocational development as a life process. Concepts from the psychology of vocational development are examined as a basis for implementing the scientist-practitioner model through career counseling.

- 719. **Brain Damage and Behavior.** 3 hrs. Prerequisite: Permission of instructor. Causes of brain injury are studied and their effect on the mental and physical behavior of man are considered.
- 720. **Psychological Interventions with Children.** 3 hrs. An introduction to specialized counseling interventions with children.
- 721. Conditioning and Learning. 3 hrs. An intensive study of the role of contemporary theories of learning and motivation in current research.
- 722. Cognitive Processes. 3 hrs. Theory and research in cognitive psychology and its applications.
- 725. **Motivation.** 3 hrs. Prerequisite: Permission of instructor. A study of the current theories and research in the area of human and animal motivation.
- 726. **Perception.** 3 hrs. Prerequisite: Permission of instructor. The development and nature of human perception.
- 728. Advanced Experimental Psychology I, II, III. 3-9 hrs. For graduate students who wish to conduct publishable research not a part of a graduate thesis. Limit of 9 semester hours.
- 729. **Psychophysiology.** 3 hrs. Prerequisite: PSY 624 and permission of instructor. Study of psychophysiological principles as they apply to research and clinical problems.
- 730. **Proseminar in Psychophysiology**. 1-3 hrs. May be repeated to limit of 15 hrs. Prerequisite: Permission of instructor. Analysis of major topics in psychophysiology; laboratory techniques and experience.
- 732. Marriage and Family Therapy. 3 hrs. A survey of marital and family therapy models. Attention is given to the application of systems models.
- 733. Applied Psychology Field Experience. 1-3 hrs. Open only to psychology majors. Supervised applied experience in a variety of applied settings. Limit of 15 hours.
- 734. Behavior Therapy. 3 hrs. Prerequisite: Doctoral track and permission of instructor. Study of the principles of behavioral change and the evaluation of clinical research in behavior modification.
- 735. Clinical Psychology Externship. 3 hrs. Prerequisite: PSY 736, 782, and permission of the Director of Clinical Training. Supervised clinical experience in community, residential, and hospital mental health settings.
- 736. Pre-Practicum in Clinical Psychology. 3 hrs. Prerequisite: Permission of the Director of Clinical Training and doctoral status in clinical psychology. Procedures for the operation of the Psychology Clinic and basic interviewing.
- 737. Administration and Supervision in Clinical Psychology. 3 hrs. Prerequisite: Doctoral status in the Clinical program and permission of instructor. Techniques of administration and supervision of clinical psychologists in mental health settings.
- 738. Alcoholism and Drug Abuse. 3 hrs. Advanced topics in alcoholism and drug abuse. Approximately one-half of the course is devoted to basic concepts with the remainder devoted to design and implementation of intervention strategies.
- 739. Topics in Student Personnel Services. 3 hrs. Prerequisite: PSY 639 or permission of instructor. A topical study of current issues and trends in the design of student development services in higher education.
- 740. **Objective Personality Assessment.** 3 hrs. Prerequisites: PSY 780 or PSY 777, doctoral track, and permission of the instructor. The use and interpretation of objective personality tests.
- 741. **Projective Personality Assessment.** 3 hrs. Prerequisites: PSY 635 and 740 and permission of the instructor. The use and interpretation of the Rorschach, Thematic Apperception Test, and other projective personality instruments.
- 748. **Integration of Clinical Assessment.** 3 hrs. Prerequisites: PSY 641, 740, 741, 782 and permission of the instructor. The use and integration of a battery of assessment devices in generating comprehensive psychodiagnostic evaluations.
- 750. Advanced Social Psychology. 3 hrs. Examination of contemporary theory and research of group influence on the individual.
- 751. **Performance Appraisal.** 3 hrs. Prerequisite: PSY 551 or permission of instructor. Examination of the development and applications of performance appraisal systems.
- 752. Management Training and Development. 3 hrs. Prerequisite: PSY 451 or 551. Study of the principles and techniques of management appraisal and training.

- 753. Leadership. 3 hrs. Prerequisite: PSY 451 or 551. Study of the factors affecting leadership in a school or industrial setting.
- 754. **Psychology of Organizational Development.** 3 hrs. Prerequisite: Admission to the I/O program or PSY 451 or 551. Application of psychological principles to organizational problems.
- 755. Practicum in Industrial/Organizational Psychology. 3 hrs. Prerequisite: Permission of the I/O Training Director. May be repeated up to 15 semester hours. Supervised I/O training experiences.
- 761. Experimental Design. 3 hrs. Prerequisites: PSY 660, PSY 663, or permission of instructor. Problems with various experimental designs, with emphasis on complex designs requiring primarily multivariate statistical procedures.
- 762. Counseling Psychology Practicum II. 3 hrs. Prerequisite: PSY 652 and prior arrangement with instructor. An intermediate-level clinic practicum in counseling and psychological services. Students are expected to acquire advanced competencies in counseling and case management and to demonstrate an integration of theory with practice.
- 763. Group Counseling Practicum. 3 hrs. Prerequisites: PSY 652 (or equivalent), 710 (or equivalent) and permission of instructor. A practicum in which students facilitate and/or co-facilitate groups under supervision. Weekly staffings are scheduled with the supervisor to provide feedback and to allow discussion of problems and issues.
- 764. Factor Analysis. 3 hrs. Prerequisites: PSY 660, 662, or permission of instructor. An introduction to modern factor analytic and clustering techniques with emphasis on computer applications and interpretation of results.
- 765. **Personnel Selection.** 3 hrs. Prerequisite: PSY 551 or permission of instructor. Examination of psychological methods in the selection and placement of job applicants.
- 766. Work Motivation and Attitudes. 3 hrs. Prerequisite: PSY 551 or permission of instructor. Examination of theories of work motivation, attitudes, and their application.
- 767. Social Processes in Organizations. 3 hrs. Prerequisite: PSY 551 or permission of instructor. Examination of turnover, absenteeism, career development, conflict, occupational socialization, and social interactions in organizations.
- 768. **Psychometric Theory**. 3 hrs. Prerequisite: PSY 411/511 or permission of instructor. Examination of psychometric theory and its application in measurement of psychological variables.
- 770. **Intelligence: Theories and Development.** 3 hrs. Nature of intelligence and its development; critical evaluation of methods of measurement; relation of intelligence to social efficiency.
- 771. Practicum in School Psychology. 3 hrs. May be repeated to limit of 18 hrs. Prerequisite: Admission to the school psychology training program or permission of instructor. Supervised application of school psychological procedures.
- 772. **Interventions in School Psychology.** 3 hrs. May be repeated to limit of 18 hours. Prerequisite: Admission to the school psychology program or permission of instructor. Theory and application of various interventions in school psychology.
- 777. Psychological Disorders of Childhood. 3 hrs. A comprehensive analysis of the major behavior disorders of childhood.
- 778. Experimental Child Psychology. 3 hrs. Prerequisite: Permission of the instructor. An intensive study of theory, methodology, and research in child psychology.
- 779. Seminar in Developmental Psychology. 3 hrs. Prerequisite: Permission of the instructor. Consideration of specific contemporary problems and issues in developmental psychology. May be taken for a total of 9 semester hours.
- 780. Advanced Psychopathology. 3 hrs. Prerequisites: Doctoral track and permission of the instructor. Intensive study of personality dynamics as related to aberrant behavior, with emphasis on current research.
- 781. Neurological Bases of Behavior. 3 hrs. Prerequisites: PSY 624, doctoral status, and permission of instructor. An introducntion to neuroanatomy and the behavioral consequences of neuropathology.
- 782. Clinical Psychology Practicum. 3 hrs. Prerequisites: PSY 736 and five of the seven clinical core courses, and permission of the Director of Clinical Training. May be repeated up to 15 semester hours. Supervised clinical training in the Psychology Clinic.
- 784. **Systems of Psychotherapy**, 3 hrs. Prerequisite: Doctoral Clinical track and permission of the instructor. An analysis of the theories and techniques of current systems of psychotherapy.

- 786. Counseling Psychology Practicum III. 3 hrs. Prerequisite: Permission of Instructor. An advanced practicum in which students develop applied competencies appropriate to their area of specialization under supervision.
- 788. Medical Aspects of Developmental Disabilities. 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.
- 790. Field Problems, 3 hrs.
- 791. **Research in Psychology.** 1-16 hrs. Prerequisite: Permission of the instructor.
- 792. Special Problems. 1-16 hrs.
- 793. Research in School Psychology. 1 hr. May be repeated up to limit of 4 hrs. Prerequisite: Admission to the school psychology training program or permission of instructor. Current research in school psychology.
- 794. Psychology Research Apprenticeship. 3-9 hrs. Prerequisite: Permission of instructor. Research training through participation in programmatic research conducted within the Department of Psychology.
- 796. Field Internship. 3-6 hrs. Prerequisites: PSY 762 and prior arrangement with instructor. Affords opportunity for master's-level and specialist students to receive supervised practice experiences in field setting.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 800. **Health Psychology.** 3 hrs. Designed to acquaint students with concepts in behavioral medicine and with the psychologist's role in health psychology.
- 802. Clinical Neuropsychology. 3 hrs. Prerequisites: PSY 624, 641, 736, 780, doctoral track, and permission of the instructor. An introduction to clinical neuropsychology.
- 807. Clinical Health Psychology Practicum. 3 hrs. Limit of 9 semester hours. Prerequisites: Enrollment in the clinical health psychology sub-specialty program. Hospital, clinic, and practicum experience in the methods and procedures of health psychology, neuropsychology, and clinical psychophysiology.
- 810. **Doctoral Integrative Seminar**. 1 hr. A weekly seminar designed to integrate instructional experiences of doctoral students during their first year of residency.
- 811. Advanced Seminar in Psychotherapy. 3 hrs. Prerequisites: CPY 713 or PSY 784 and permission of instructor. An advanced study of the domain of psychotherapy with an emphasis on identifying central constructs and the development of synthesis. Students are expected to (a) evaluate various psychotherapeutic approaches at philosophical, conceptual, and practical levels and (b) continue to refine their own developing theoretical positions.
- 835. Advanced Practicum in Counseling Psychology. 1-3 hrs. Prerequisite: Permission of instructor. Supervised practice.
- 836. Proseminar in Counseling Psychology. 3 hrs. A professional issues seminar for advanced students. Topics include: historical antecedents, training models, credentialing, accreditation, and current trends and issues in professional psychology.
- 840. Externship. 3-6 hrs. Prerequisite: Permission of instructor. Supervised experience in off-campus setting.
- 850. Advanced Research Seminar. 3 hrs. Prerequisite: Permission of instructor.
- 860. Counseling Psychology Practicum IV. 1-3 hrs. Prerequisites: PSY 786 and prior arrangement with instructor. An advanced clinic practicum in counseling and psychological services.
- 870. Supervision: Theory and Practice. 3-6 hrs. Prerequisite: Permission of instructor. An advanced seminar in the supervision of others who deliver counseling and psychological services. Students enroll concurrent with the assignment of clinic supervision responsibilities.
- 880. Internship in School Psychology. 4 hrs. Prerequisite: Permission of training director. May be repeated up to 12 semester hours. Supervised, full-time practice of school psychology in an approved setting. Selection of internship must conform to NASP standards.
- 881. Internship in Clinical Psychology. 4 hrs. Prerequisite: Successful completion of PSY 782 and approval of the Director of Clinical Training. To be repeated for 12 semester hours total.

- 882. Internship in Industrial/Organizational Psychology. 4 hrs. Prerequisite: Permission of the I/O Training Director. To be repeated for 12 semester hours total. Full-time practice of I/O Psychology under supervision in an approved setting.
- 883. Internship. 4 hrs. Prerequisites: Approval by program faculty and permission of Training Director. Students receive 1900-2000 hours of supervised training in an off-campus APA-approved internship program in professional psychology. To be repeated for nine semester hours total.
- 898. Dissertation. 12 hrs.

# RADIO-TELEVISION-FILM (RTF-220) See Course Listing Under COMMUNICATION.

# **REAL ESTATE AND INSURANCE (REI-617)**

- 532. Real Estate Finance. 3 hrs. Prerequisite: FIN 300. A study of the sources of real estate funds and analytical techniques for investment decision making.
- 598. International Insurance Seminar Abroad. 3 hrs. Prerequisite: Consent of Program Director. Conducted in London, England: a series of lectures and discussions involving authorities on international insurance issues and practices.
- 692. Special Problems. 3 hrs. Prerequisite: Consent of department chair.
- 699. International Insurance Research Abroad. 3 hrs. Prerequisite: Consent of Program Director. A research course in international insurance offered for students enrolled in REI 598.

#### **RELIGION (REL-288)**

- ANT 524. Primitive Religion. (May be taken for credit as a religion course.)
- 535. Religions of the Near East. 3 hrs. A study of Judaism, Zoroastrian, and Islamic literature and thought.
- 536. Mysticism. 3 hrs. A study of the major themes and issues of religious mysticism-East and West.
- 537. Religions of the Far East. 3 hrs. A study of Hinduism, Buddhism, Taoism, Confucianism, and Shintoism.
- 590. Contemporary Religious Problems. 3 hrs. An examination of specific problems within the broad spectrum of contemporary religious concern.
- 599. **Religious Studies Abroad.** 3-6 hrs. The study of religious themes in various parts of the world. Offered abroad through the Center for International Education.

# **RESEARCH AND FOUNDATIONS (REF-125)**

- +516. Utilization of Audiovisual Media and Equipment. 3 hrs.
- 525. Instructional Styles and Models in Media Programs. 3 hrs.
- 526. Film and Television in Media Programs. 3 hrs.
- 536. **Designing Educational Systems for Individualized Instruction.** 3 hrs. Translation of instructional specifications into prototype systems.
- 550. **Test Item Development.** 3 hrs. Includes procedures for mastering test item development techniques through active participation.
- 590. Instructional Television: Utilization and Production. 3 hrs. Utilization of television in instructional settings. Emphasis on programming from Mississippi ETV and the use of portopac television equipment.
- 591. School Media Center Administration Workshop. 3 hrs.
- 599. **British Studies: Research in British Education.** 3 hrs. To provide students with supervised research study on British education that relates to their own interests or educational specialty.
- 601. Research: Its Introduction and Methodology. 3 hrs.
- 602. **Introduction to Educational Statistics.** 3 hrs. Basic concepts and computations in descriptive statistics. Introduction to sampling procedures and inferential processes in educational research.
- 604. Foundations in American Education. 3 hrs. A brief survey of the philosophical, psychological, sociological, and historical foundations of American education.
- 605. Cultural Influences on American Education and Society. 3 hrs. A study of European educational systems.
- 607. **Basic Course in Curriculum Development.** 3 hrs. An examination of factors influencing planning and procedures for structuring and evaluating curricular experiences.

- 609. Administration of Media Centers, 3 hrs.
- 615. **Student Discipline in the Schools.** 3 hrs. Presentation of general principles, techniques, procedures, and legal aspects of discipline.
- +616. Instructional Graphics. 3 hrs.
- 618. Instructional Photography. 3 hrs.
- 620. Foundations of Instructional Technology. 3 hrs. Survey of the historical aspects of instructional media. Application of research in the development of technology relating to libraries, classrooms, industry, and instructional settings.
- 621. Selection and Organization of Media Resources. 3 hrs.
- +622. Design and Production of Media Materials. 3 hrs.
- +623. Advanced Media Productions Techniques. 3 hrs.
- 625. Instructional Video and Film Production. 3 hrs.
- 632. Measuring Results in Education. 3 hrs. Emphasis on selecting and constructing various types of achievement tests and statistical interpretation of data.
- 644. Instructional Development I. 3 hrs. Prerequisite: REF 516 or permission of the instructor. Survey of various instructional development models for the development, revision, or revitalization of educational programs.
- 645. Computers in Education. 3 hrs. Applications of computer technology to instructional, information, and administrative programs from the user's point of view.
- 660. Economic Education for Teachers. 3 hrs. Emphasis on in-depth understanding of our economic system and integration of economic concepts into the social studies.
- 680. Direction and Supervision of Student Teaching. 3 hrs. Designed to guide supervising teachers in orienting and involving student teachers.
- 692. Special Problems. 1-3 hrs.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.
- 701. Analysis of Teaching Behavior. 3 hrs. Designed to analyze teacher behavior to determine competency, including interaction analysis and microteaching skills.
- 709. **Social Foundations of Education**. 3 hrs. A study of contrasting motivations and values of various cultural groups and their implications for education.
- 712. Computer Applications in Educational Research. 3 hrs. Prerequisites: REF 761, 762. Skills development course in computer analysis of behavioral science data, systems analysis, financial, and personnel accounting procedures.
- 718. Practicum in Educational Research. 3 hrs. Prerequisites: REF 761, 762. Application of appropriate research models, structure of research reports, critique of published research and of student's research problem.
- 720. Measurement in Educational Research. 3 hrs. Prerequisites: REF 761, 762. Survey of the theory of measurement including true score theory, reliability, validity, item analysis, and item selection techniques.
- 740. **Programmed Instruction.** 3 hrs. Theories and techniques in designing, producing, and evaluating programmed instructional materials.
- 742. Research in Instructional Systems Technology. 3 hrs. Research in problems of formulating objectives, analyzing audiences, using media, and evaluating education outcomes.
- 761. Experimental Design. 3 hrs. Prerequisite: REF 602 recommended. Probability theory and theoretical distributions in experimental design. Techniques including tests, simple and complex analysis of variance, analysis of co-variance.
- 762. Advanced Regression Analysis. 3 hrs. Prerequisite: REF 761. Correlation and regression theory. Techniques associated with bivariate, partial, and multiple correlation and applied multiple linear regression.
- 770. **Evaluation Design and Methodology**. 3 hrs. The principles of evaluation. Involvement in a practical evaluation problem employing measurement techniques and statistical methodology.
- 791. Field Problems in Educational Research. 1-12 hrs. Prerequisite: Approval of major professor and Educational Research Staff.

- 792. Special Problems in Educational Research I, II, III. 1 hr. each. Prerequisite: Approval of major professor and Educational Research Staff. Application of specific research procedures in the development of skills in various types of research. The preparation of a scholarly paper is required.
- 794. Field Problems, 3 hrs.
- 798. **Specialist Thesis.** 3 hrs. Selection and development of a practical educational research problem for the specialist's degree. A scholarly research paper is required.
- 810. Design and Methodology in Institutional Research. 3 hrs. Prerequisites: REF 601, 761, 762. Practical application of institutional research design and methodology emphasizing computer utilization and field work.
- 816. History of Public Education in the United States. 3 hrs. A critical study of the evolution of public education with emphasis on critical issues.
- 818. Comparative Philosophies of Education. 3 hrs. A critical examination of theoretical concepts of leading modern philosophers and their implications for education.
- 820. Comparative Education. 3 hrs. Survey of educational patterns of selected countries.
- 824. Advanced Experimental Design. 3 hrs. Prerequisites: REF 761, 762. Experimental and quasi experimental designs in educational research. Emphasis upon utilization of design principle and appropriate statistical treatment.
- 830. Multivariate Analysis in Educational Research. 3 hrs. Prerequisites: REF 761, 762. Theory and application of multiple regression and discriminant analysis, canonical correlation, multivariate analysis of variance and covariance.
- 893. Advanced Educational Research. 3 hrs. Seminar in types and problems of educational research, observation and data collection methods, and standards of reporting educational research.

# **SCIENCE EDUCATION (SCE-380)**

- 522. British Studies: History of Science. 3-6 hrs. Lecture series and research in the history of science offered abroad under the auspices of the Institute of Anglo-American Studies. (May be taken as BSC 522 or HIS 522).
- +532. Science for Elementary Teachers. 3 hrs. Prerequisites: 12 semester hours of science. Designed to provide experience in presenting scientific principles to the elementary school child.
- 535. Marine Science for Elementary Teachers. 3 hrs. Prerequisite: Permission of instructor. Designed to acquaint teachers with marine science concepts. (May be taken as MAR 558).
- 541. Methods of Teaching the Metric System. 3 hrs. Lectures and exercises in measurements using the International System of Units.
- 553. Earth and Environmental Science for Intermediate School Teachers, 3 hrs. Prerequisite: Permission of instructor. To familiarize teachers with the materials, methods and techniques of earth and environmental science.
- 554. **Biological Sciences for Intermediate School Teachers.** 3 hrs. An examination of the subject matter, techniques, and methods of teaching the life sciences.
- 555. Physical Science for Intermediate School Teachers. 3 hrs. An examination of the subject matter, techniques, and methods for teaching the physical sciences.
- 556. Techniques in Marine Science Education. 3 hrs. Prerequisite: Permission of instructor. Designed to acquaint teachers with the marine resources of the Mississippi Coastal Zone. (May be taken as MAR 556).
- 557. Marine Science for Teachers. 3 hrs. Prerequisite: Permission of instructor. Emphasis will be placed on measurements and analysis of the marine habitat and ecological relationships. (May be taken as MAR 557)
- 559. Coastal Ecology for Teachers. 3 hrs. Prerequisite: Permission of instructor. Corequisite: SCE 559L. Designed to provide teachers with a background in basic coastal ecology. (May be taken as MAR 559.)
- 559-L. Coastal Ecology for Teachers Laboratory. 1 hr. Prerequisite: Permission of instructor. Corequisite for SCE 559. (May be taken as MAR 559L.)
- 560. Methods in Teaching Science—Secondary. 3 hrs. Designed to familiarize teachers with current trends, methods, and techniques of teaching science to secondary school students.
- +561. Microcomputer Applications in the Teaching of Science. 3 hrs. An examination of software, literature, research and strategies.

- 571. Teaching Chemistry in the Secondary School. 3 hrs. Prerequisite: Admission to the Graduate Program or permission of instrutor. Corequisite: SCE 571L. Application of chemical knowledge to designing, developing and assessing instruction. May be taken at the undergraduate level as CHE 471.
- 571L. Laboratory for Teaching Chemistry in the Secondary School. 1 hr. Prerequisite: Admission to the Graduate Program or permission of instructor. Corequisite: SCE 571. Experience in developing and evaluating laboratory instruction and in establishing and maintaining safety. May be taken at the undergraduate level as CHE 471L.
- 572. Physics for Secondary Teachers—Methods and Techniques. 3 hrs. Prerequisite: Permission of instructor.
- 590. Aerospace Resources for Teachers. 3 hrs. Teachers and administrators are given a review of aerospace science and technology and how to take advantage of students' fascination with flying.
- 595. Applications of Basic Concepts in Biology for Secondary School. 3 hrs. Prerequisite: Admission to the Graduate Program or permission of instructor. Laboratory to accompany SCE 595. May be taken at the undergraduate level as BSC 495L.
- 595L. Application of Basic Concepts in Biology for Secondary School Laboratory. 2 hrs. Prerequisite: Admission to the Graduate Program or permission of instructor. Laboratory to accompany SCE 595. May be taken at the undergraduate level as BSC 495L.
- 599. Field Studies in Marine Science Education, 3-9 hrs. Prerequisite: Permission of instructor. Study and investigate marine environments outside of Mississippi. Offered through the Center for International Education.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs.
- 700. Science Curriculum in the Public Schools. 3 hrs. Prerequisite: SCE 703. An examination of elementary and secondary science curricula.
- 701. **Problems in Science Teaching.** 3 hrs. Prerequisite: Permission of instructor. Study of problems related to curriculum, methodology, activities, professionalism, and evaluation in science teaching.
- 702. Field Techniques of Demonstrating and Experimenting with Scientific Principles. 3 hrs. For science teachers considering fundamental aspects of biology, chemistry, geology, and physics.
- 703. **Foundations of Science Education.** 3 hrs. Prerequisite: Permission of instructor. Study of philosophical premises, the nature of science, psychological and pedagogical theories.
- 730. Physics for Elementary School Teachers. 3 hrs. Prerequisites: 6 hours in physical science and 6 hours in biological science. Principles and general ideas that can be directly applied to the elementary grades.
- 731. Chemistry for Elementary School Teachers. 3 hrs. Prerequisites: 6 hours in physical science and 6 hours in biological science. Chemical principles that represent the changes in chemistry that have taken place over the last two decades.
- 732. Biology for Elementary School Teachers. 3 hrs. Prerequisites: 6 hours in physical science and 6 hours in biological science. A study of content, techniques, and methods of teaching life science concepts.
- 733. Earth Science for Elementary School Teachers. 3 hrs. Prerequisites: 6 hours in physical science and 6 hours in biological science. A study of techniques and methods of teaching earth science concepts.
- 789. Seminar. 1 hr. Discussion of current trends and practices in science education.
- 791. Research in Science Education. 1-16 hrs.
- 792. Special Problems. 1-3 hrs. arr.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 798. Research Problem. 3 hrs.
- 898. Dissertation. 12 hrs.

#### **SCIENTIFIC COMPUTING (SC-327)**

- 710. Computational Methods for Physical Systems. 3 hrs. Prerequisite: High level Fortran, familiarities with methods in statistical mechanics and permission of instructor. Monte Carlo sampling and simulations, including multispin and cluster updating, percolation, molecular dynamics, finite size scaling and optimizations in computing.
- 720. Mathematics for Scientific Computing I. 3 hrs. Prerequisite: Permission of instructor. Numerical methods for the solution of matrix equations and for eigenvector/value finding techniques, including criteria for selection among available algorithms.
- 721. **Mathematics for Scientific Computing II.** 3 hrs. Prerequisite: SC 720 or permission of instructor. Techniques for interpolation and differentiation; computer simulations for the solution of ODEs and PDEs including Runge-Kutta, Adams/Bashforth, spectral, and shooting methods.
- 726. Remote Sensing I. 3 hrs. An advanced course emphasizing digital image processing of remotely sensed multispectral data, including use of applications software to process multispectral imaging.
- 730. Parallel Algorithms. 3 hrs. Prerequisites: Knowledge of sequential algorithm design and analysis, NP-completeness, proficiency in high level language programming including pointer manipulation. Topics include models of parallel computation, general techniques, graph algorithms, expression evaluation, parallel sorting, parallel string matching, and P-completeness.
- 735. Scientific Numerical Modeling. 3 hrs. Prerequisite: permission of instructor. The physical, mathematical, and computational basis for modeling. Physical models are drawn from chemistry, biology, and fluid dynamics.
- 740. Seminar I. 1 hr. Study of current research techniques and results in scientific computing. Can be taken four times. The objective of this course is to acquaint students with techniques and applications of scientific computing. The students will study the literature in field and hear presentations from practitioners in the field. Letter grades will be assigned on the basis of written or oral reports on assigned topics.
- 750. **Introduction to Computational Fluid Dynamics.** 3 hrs. Prerequisite: Knowledge of the solution of ordinary and partial differential equations. Development of the concepts, numerical methods and algorithms of computational fluid dynamics in conjunction with modeling.
- 760. Underwater Acoustic System Analysis. 3 hrs. Prerequisite: Knowledge of underwater acoustics and Fourier transforms. Underwater acoustic signal generation, propagation, and analysis including array shading, beam steering, correlation properties of ambient noise, and estimation of signal parameters.
- 762. Computational Ocean Acoustics. 3 hrs. Prerequisite: Understanding of the numerical solution of partial differential equations, the physics of waves, underwater acoustics, and computer programming. Development of the mathematical framework for underwater acoustic propagation models with special emphasis on the parabolic equation and computer code for its implementation.
- 791. Research in Scientific Computing. 1-16 hrs. Prerequisite: Approval of major professor.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree.
- 898. Dissertation, 12 hrs.

# **SOCIAL WORK (SWK-020)**

#### **Foundation**

- 601. Human Behavior and Social Environment I. 3 hrs. Introduction to general systems theory and applied to the analysis of individuals, families, small groups, organizations and communities.
- 602. Human Behavior and Social Environment II. 3 hrs. Prerequisite: SWK 601. Physiological, cognitive, intellectual, and emotional development of individuals; analysis of theoretical explanations of personality.
- 605. Social Welfare Policy I. 3 hrs. History of social work and social welfare; values which influence policy; formation of policy and macro policy analysis.
- 606. Social Welfare Policy II. 2 hrs. Prerequisite: SWK 605. Social welfare planning and social policy analysis, with special concern for developing and critiquing policy in an agency based setting.
- 608. Social Work Generalist Practice I. 3 hrs. Systemic and problem-solving approaches to social work practice with individuals, families, organizations, and groups; integrative framework for knowledge, values and skills.
- 609. Social Work Generalist Practice II. 3 hrs. Prerequisite: SWK 608. Differential practice roles and communication processes; resource development, linkage, and utilization.

- 617. Social Work Research I. 3 hrs. Introduction to the foundations of knowledge building through a careful analysis of philosophical premises and examination of new approaches to scientific method. It also covers research designs and other fundamental issues which have bearing on knowledge development in social work.
- 634. Social Work Practice in a Diverse Society. 2 hrs. Comparative cross-cultural theories and concepts related to ethnic-minority groups and alternative life styles.
- 637. **Social Work Research II.** 2 hrs. Prerequisite: SWK 617. Comparative social work research methodologies with special attention to single subject design and program evaluation.
- 641. Field Education I. 3 hrs. The first practicum is designed to integrate and enhance values, knowledge, and skills at the foundation level with micro and some messo experiences. Includes integrative seminar.
- 642. Field Education II. 3 hrs. Prerequisite: SWK 641 and a B average in all Social Work courses. The second practicum designed to build on the integration and enhancement of values, knowledge, and skills developed in SWK 641, completing the foundation level of micro and some messo experiences. Includes integrative seminar.

#### **Advanced Practice and Electives**

- 620. Computer Use for Human Service Workers, 3 hrs. Introductory course for social workers and other human service workers; focus on information systems for social work. Includes on-hands computer experience.
- 635. Social Service Management and Administration. 3 hrs. Survey of principal management functions in a systems context; study of selected topics such as leadership and organizational communication.
- 651. **Time-Limited Intervention.** 2 hrs. Techniques of task-centered intervention and crisis intervention in a social work practice.
- 653. **Individual and Family Assessment.** 3 hrs. This course deals with individual and family pathology, and diagnostic criteria. Students are exposed to DSMIIIR (DSM IV) and the Person in the Environment (PIE).
- 655. Social Work Practice in Child Welfare Settings. 3 hrs. Multidimensional intervention with children and adolescents who have experienced neglect and abusive conditions.
- 658. Advanced Interventive Methods. 3 hrs. Social work intervention focused on cognition, affect, and behavior with individuals, families, and groups. This course is integrated with field seminar SWK 673.
- 663. Consultation and Supervision. 2 hrs. Concepts and skills related to consultation and supervision with application to a number of systems but emphasizing application to organizations.
- 665. Social Work and the Law. 2 hrs. An exploration of the interrelationships between social work and the law.
- 666. Community Development and Social Planning. 3 hrs. Theories and techniques of community development and planning with special attention to practice needs and proposal writing.
- 673. Field Education III. 6 hrs. Prerequisites: SWK 641, 642, and a B average in all social work courses. Must be taken concurrently with SWK 658. The third practicum is designed to build an advanced level integrated field experience on the prior learning in SWK 641 and 642. This practicum gives experiences in the macro systems as well as continuing with micro and messo systems. Includes integrative seminar.
- 674. Social Work Practice with Families. 3 hrs. Theories, intervention skills, policy issues related to families and the social service delivery system.
- 675. Social Work Practice with Persons in Middle and Late Life, 3 hrs. Psychosocial variables at critical life transition points are explored with practice and policy perspectives.
- 676. Social Work Practice in Health Systems. 3 hrs. Assessment and modification of conditions which affect individual's health and mental health through intervention skills with individuals, families, groups.
- 677. Social Work Practice with Children and Adolescents. 3 hrs. Focus on practice concepts, theories and skills for work with specific social adjustment problems utilizing a general systems framework.
- 688. Medical Aspects of Developmental Disabilities. 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.
- 691. **Research Practicum.** 2 hrs. Prerequisites: SWK 617 and 637. Emphasis will be placed on the acquisition of a more indepth level of knowledge and skills to review and use various evaluative research designs and designs to evaluate practice effectiveness.

- 692. **Special Problems**. 1-6 hrs. Study of a problem in order to develop knowledge in an area of student interest. Paper and/or project required.
- 696. Social Work Practice with Groups. 3 hrs. Design of preventative, developmental and remedial group services for at risk populations.
- 698, Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.
- 699. British Studies: General Systems Theory-The British Perspective. 3-6 hrs.

### SOCIOLOGY (SOC-292)

- 515. Sex Roles and Gender in Society. 3 hrs. A study of the relationship between sex roles and broader cultural patterns in various societies.
- 521. Sociological Topics. 3 hrs. Variable content; can be repeated three times in separate topical offerings.
- 523. **Sociology of Health.** 3 hrs. An analysis of the field of health and health care delivery from a sociological perspective.
- 524. Sociology of Aging. 3 hrs. A survey of demographic, social, and cultural aspects of aging with particular emphasis upon American society and the types of problems encountered by older persons.
- 526. **Sociology of Education.** 3 hrs. A comprehensive study of the educational institution, its relationship to the community and society.
- 530. Political Sociology. 3 hrs. A study of politics as a social institution, its relationship with other institutions, and its place in a changing society.
- 544. **Juvenile Delinquency.** 3 hrs. A study of causes and the nature of juvenile delinquency, the development of the juvenile court, probation, and other rehabilitative programs.
- 550. **Social Psychology.** 3 hrs. A study of how the thoughts and behaviors of individuals are influenced by the actual or implied presence of others.
- 560. Quantitative Methods. 3 hrs. A survey of quantitative research techniques, focusing on descriptive and inferential statistics and computer applications.
- 561. **Population.** 3 hrs. Prerequisite: SOC 460. An introduction to demography, analyzing significant changes in population composition.
- 562. **Methods of Social Research.** 3 hrs. A study of the production and interpretation of social research with an emphasis on the relationship of theory and method.
- 571. Social Institutions. 3 hrs. A study of selected American social institutions, focusing on class and power structures, the rise of post-industrial society, religious and moral divisions, and democratic individualism.
- 575. **Social Inequality.** 3 hrs. Research and theory in social differentiation, class, status, power, and mobility. Analysis of inequality and the effects of socioeconomic status upon behavior and social organization.
- 581. **History of Social Thought.** 3 hrs. An examination of early social thought, tracing the development of western thought and ideas from Hammurabi to Comte.
- 582. **Sociological Theory.** 3 hrs. A study of classical and contemporary social theory, focusing on selected theorists (e.g. Weber, Durkheim, Marx, Merton, and Goffman) and selected topics, including anomie and alienation, and rise of capitalism, theories of crime, and concepts of self.
- 599. **British Studies.** 3 hrs. Variable content. Lecture series and research offered abroad under the auspices of the Institute of Anglo-American Studies.
- 692. Special Study Projects in Sociology. 1-6 hrs. Special projects in reading, survey, or research in sociology. Work will be under the direction of graduate faculty.

# **SPECIAL EDUCATION (SPE-190)**

- 500. The Psychology and Education of the Exceptional Child. 3 hrs. An introduction to exceptional populations and procedures and policies relating to their education and citizenship.
- 560. Characteristics of the Gifted and Talented. 3 hrs. Study of gifted populations to include characteristics, learning modes, and assessment procedures.
- 578. Specialized Studies in Developmental Disabilities. 1-6 hrs. Specialized study and skill acquisition in the area of developmental disabilities. Topics vary.

- 590. Workshop in Special Education. 3 hrs.
- 597. **Professional Collaboration for Developmental Disability Services.** 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.
- 598. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.
- 630. Advanced Studies in Specific Learning Disabilities. 3 hrs. A study of decoding, cognitive, and encoding deficits in handicapped learning disabled pupils.
- 631. Advanced Curricula for Specific Learning Disabilities: Elementary. 3 hrs. Methods and materials for instruction of elementary level children with specific learning disabilities.
- 632. Advanced Curricula for Specific Learning Disabilities: Secondary. 3 hrs. Methods and materials for instruction of secondary level individuals with specific learning disabilities.
- 634. Advanced Practicum in Specific Learning Disabilities. 3-6 hrs. Professional work with pupils and/or specified activities.
- 640. Advanced Studies in Mental Retardation. 3 hrs. Problems of diagnosis and treatment of persons with mental retardation. Investigation of current research, curricula design, and social emotional parameters are considered.
- 641. Vocational Education in Mental Retardation. 3 hrs. Vocational intervention and services promoting the transition from school to gainful employment are addressed.
- 643. Advanced Curriculum Studies for the Mentally Retarded. 3 hrs. Study of different approaches to curriculum development, with emphasis on materials and goals for teaching persons with mental retardation.
- 644. Advanced Practicum in Mental Retardation. 3-6 hrs. Professional work with pupils and/or specific activities.
- 645. Programming for the Severe, Profound, and Multiply Handicapped. 3 hrs. Curricula development activities with pupils with extreme learning problems.
- 650. The Psychology and Education of the Emotionally Disturbed. 3 hrs. This course explores the characteristics of deviant behavior and its causation.
- 651. Advanced Methods in Behavioral Management for the Handicapped. 3 hrs. This course explores educational programs for the disadvantaged, delinquent, migrant, and other socially deviant groups.
- 652. **Basic Curriculum for the Emotionally Disturbed.** 3 hrs. A course investigating programs, methods and materials in the education of the emotionally disturbed child; the role of the teacher in relation to interdisciplinary teams.
- 654. Practicum in Emotionally Handicapped. 3 hrs. Professional work with pupils and/or specified activities.
- 661. **Methods and Materials in Teaching the Gifted.** 3 hrs. A study of programs, curricula, models, and methodologies for the intellectually advanced learners.
- 662. Curricula Development for the Gifted. 3 hrs. Curricula writing, module development, and attentive modes of instruction for gifted pupils.
- 663. Programming for the Atypical Gifted. 3 hrs. Study of individuals who display diverse modes of high achievement and creativity.
- 664. **Practicum Gifted.** 3 hrs. Practicum for advanced students with gifted students in public school or clinical settings.
- 678. Assessment and Intervention for Handicapped Children 0-5. 3 hrs. Current issues and theories regarding assessment and intervention procedures for at-risk and handicapped young children, birth through 5.
- 680. Advanced Practicum in Special Education. 3-9 hrs. Practicum for master's degree students unique to individual program plans. The experience will focus on assessment, curriculum, and/or other issues related to exceptional individuals.
- 688. Medical Aspects of Developmental Disabilities. 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.
- 691. Research in Special Education. 1-16 hrs.
- 692. Special Problems. 1 hr. Examination of medical, sociological, biological, psychological, and institutional aspects of exceptional children.

- 694. Field Problems. 3 hrs. An investigation of a professional problem in the field of special education. May be selected as the culminating requirement of the specialists degree.
- 700. **Issues in Special Education.** 1 hr. A study of current theories, models, programs, and reports in special education. Open to non-majors.
- 701. **Problems in Special Education Research Design.** 3 hrs. Primary emphasis is placed on the review, development, and evaluation of research topics in the student's area of specialization.
- 709. Diagnostic Techniques for Exceptional Children. 3 hrs. Interpretation and application of measurement for exceptional children with emphasis on curriculum decision making. Open to nonmaiors.
- 770. Administration and Supervision of Programs for Exceptional Children. 3 hrs. Designed for educators and supervisors of programs for exceptional children; organization and administration of programs for exceptional children.
- 772. Internship in Special Education Administration. 1-6 hrs. To provide internship experience for specialist and doctoral students in Special Education Administration, institutions, state department.
- 791. Research in Special Education. 1-16 hrs. Prerequisite: Approval of the major professor. To be conducted in the student's area of specialization.
- 792. Special Problems. 3 hrs.
- 794. Specialist Field Study. 1-6 hrs. A practical project conducted in the student's area of specialization.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 798. Specialist Thesis. 6 hrs. A scholarly project conducted in the student's area of specialization.
- 801. **Teacher Education in Special Education**. 3 hrs. Development of programs, courses of study, observation techniques, models, micro-teaching units, modules in higher education.
- 802. Service Units and Public Relations in Special Education. 3 hrs. Inservice training units, conference planning, workshop, parent and national organizations.
- 803. Program Evaluation and Funding in Special Education. 3 hrs. Study of program accountability modes, grant writing, and sources.
- 880. **Internship in Teacher Education.** 1-6 hrs. Individual cases are tested by students and all available information is integrated for diagnostic and educational purposes.
- 898. Dissertation, 12 hrs.

# **SPEECH AND HEARING SCIENCES (SHS-296)**

- 501. Language and Speech Development. 3 hrs. Presents the body of knowledge related to speech and language acquisition as it occurs normally.
- 502. Anatomy and Physiology of the Hearing Mechanism. 3 hrs. Provides background in the anatomy and physiology of the hearing mechanism.
- 503. Anatomy and Physiology of the Speech Mechanism. 3 hrs. Introduces structural and functional aspects of the speech mechanism.
- 506. Basic Neuroanatomy of Speech. 3 hrs. Establishes neuroanatomical and physiological bases for speech production.
- 508. **Instrumentation in Speech and Hearing Sciences.** 3 hrs. Students learn to use basic clinical/research instrumentation in a controlled setting.
- 510. **Intervention in Language Disorders.** 3 hrs. Strategies and clinical methods used in habilitation/rehabilitation of language disordered children and adults.
- 512. Diagnostic Procedures: Speech Pathology I. 3 hrs. Prerequisites: SHS 211, 411. Current evaluation procedures in speech-language pathology.
- 513. Voice Disorders. 3 hrs. Prerequisites: SHS 211, 403. Anatomical and physiological bases of voice production and the disorders.
- 516. Adult Aphasia and Related Problems. 3 hrs. Prerequisites: SHS 211, 403, 406 or permission. Presents theory, research findings, and basic therapy methods for neurogenic communicative disorders.

- 517. Speech and Language Disorders Related to Cleft Palate. 3 hrs. Prerequisites: SHS 211, 403 or equivalents. Multidisciplinary management of children and adults with cleft palate is presented.
- 518. Advanced Clinical Methods. 3 hrs. Students engage in an in-depth study of the use of specific treatment and/or diagnostic procedures.
- 519. **Organic Speech Disorders.** 3 hrs. This course surveys symptomology, etiology, and treatment procedures for organic speech disorders.
- 521. **Aural Rehabilitation.** 3 hrs. Prerequisite: SHS 221 or equivalent. Covers the management of clients with hearing loss from infants through the elderly.
- 522. **Diagnostic/Prescriptive Teaching of the Hearing Impaired.** 3 hrs. Presents task analysis, informal test construction and formal assessment for hearing impaired.
- 523. Basic Sign Language. 3 hrs. Concepts of total communication, sign language and finger spelling are stressed.
- 525. Psycho-Social Factors Associated with Hearing Impairment. 3 hrs. Prerequisite: Permission of instructor. Emphasizes psycho/social growth and development of deaf children.
- 528. Clinical Audiology I. 3 hrs. Prerequisite: SHS 221. Presents concepts in acoustics, calibration standards and basic audiological tests.
- 529. **Intermediate Sign Language.** 3 hrs. Prerequisite: SHS 523 or permission. A continuation of the Basic Sign Language Course with additional signs and situational experiences.
- 530. Speech Pathology and the Hearing Impaired Child. 3 hrs. Reviews speech and language problems, and describes methods for management.
- 531. Language Disorders I: Assessment of Children with Language Disorders. 3 hrs. Differentiates normal, disordered, and deviant language with remedial procedures.
- 532. Language Disorders II: Habilitation of the Aphasic Child. 3 hrs. A multisensory intervention program for auditory processing and communication disorders.
- 533. **Developing Language Skills with the Hearing Impaired.** 3 hrs. Presents development of language by hearing impaired children.
- 536. Developing Reading in the Hearing Impaired. 3 hrs. Prerequisite: SHS 433 or permission. The reading process, diagnostic-prescriptive teaching, and evaluation of reading skills are discussed.
- 538. Problems in Academic Subjects for the Hard-of-Hearing and Deaf. 3 hrs. Prerequisites: SHS 433, 434, 436. Stresses the need for continuous, consistent and coordinated academic programs.
- 540. Advanced Methods of Communicating with the Hearing Impaired. 3 hrs. Prerequisite: permission. Develops extensive sign vocabulary, introduces ethics of interpreting, and individualizes training for specific situations.
- 597. **Professional Collaboration for Developmental Disability Services.** 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.
- 598. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.
- 599. British Studies: Comparative Problems in Speech and Hearing Sciences, 3-6 hrs. Offered abroad under the auspices of the Institute of Anglo-American Studies.
- 601. **Designs in Research for Speech and Hearing.** 3 hrs. Statistical procedures concerning group and single-subject designs.
- 602. Current Topics in Speech and Hearing Sciences. 3 hrs. Varies each time the course is offered.
- 621. **Hearing Aids.** 3 hrs. Prerequisite: SHS 221 or permission. Presents components of electroacoustic characteristics of hearing aids and their use.
- 623. Clinical Audiology II. 3 hrs. Prerequisite: SHS 528 or permission. Special auditory tests used to determine the site of lesion of hearing loss.
- 625. Audiological Instrumentation. 3 hrs. Prerequisite: SHS 221 or permission. Covers basic electronics, auditory function measurements, research, and computer use.
- 633. School Curricula for the Hearing Impaired. 3 hrs. Prerequisites: SHS 433, 436, 437. Curricula analysis and review are stressed (majors only).
- 641. Medical Diagnosis and Treatment of Speech and Hearing Pathologies. 1-4 hrs. Prerequisite: permission. Provides opportunities for observation of operations on the auditory or speech mechanism.

- 642. Communication Problems of the Aged. 3 hrs. Prerequisite: permission. Reviews changes in speech, language and hearing associated with aging; presents rehabilitative strategies used with the population.
- 687. **Practicum in Speech-Language Pathology.** 1-9 hrs. Prerequisite: Regular full-time graduate status and permission. Students participate in diagnosis and treatment of children and adults with speech-language disorders.
- 688. **Practicum in Audiology.** 1-9 hrs. Prerequisite: Regular graduate admission and permission. Students participate in diagnosis and treatment of children and adults with hearing disorders.
- 689. **Practicum in Education of the Deaf.** 1-9 hrs. Prerequisite: Regular graduate admission and permission. Students participate in habilitative and learning activities with deaf children and adults.
- 692. **Special Problems.** 1-6 hrs. Prerequisite: permission. Students completing Plan B paper should register for three (3) hours.
- 694. Off-Campus Practicum in Speech and Hearing Sciences. 1-9 hrs. Prerequisite: permission. Students are assigned to medical, institutional, private practice, or clinical settings for supervised experience.
- 695. Student Teaching Off-Campus Practicum. 1-9 hrs. Prerequisite: permission. Students participate in supervised management of speech/language impaired school children.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 3-6 hrs. for a total of 6 hrs.
- 701. Seminar in Psychoacoustics. 3 hrs. Presents methods for studying perception of acoustic signals, detection of stimuli, perception of loudness, and pitch.
- 702. Seminar in Language Problems. 3 hrs. Language pathologies, evaluation procedures, and treatment methods are studied.
- 703. Quantitative Methods. 3 hrs. Enrollment suspended.
- 711. Seminar in Aphasia and Related Disorders. 3 hrs. Etiologies, evaluations in Neurolinguistics and current treatment procedures are presented.
- 712. Seminar in Articulation Disorders. 3 hrs. Current theories, diagnostic procedures, and therapeutic methodologies in articulation and phonology are studied.
- 713. Seminar in Cerebral Palsy. 3 hrs. Current etiologies, evaluation procedures, and treatment techniques are considered.
- 714. **Seminar in Cleft Palate.** 3 hrs. Students review the current research and interdisciplinary management of cleft lip and palate individuals.
- 715. Seminar in Clinical Counseling in Speech-Language Pathology and Hearing. 3 hrs. Therapeutic communication techniques, interview techniques, and counseling theories are studied.
- 716. Seminar in Stuttering and Related Disorders. 3 hrs. Advanced study of theories, research and remedial procedures related to fluency disorders.
- 717. **Seminar in Voice Disorders.** 3 hrs. Advanced study of pathologies, diagnosis, procedures, and remedial methods for voice and resonance problems.
- 718. Seminar in Psychology of the Deaf and Speech Handicapped. 3 hrs. Effects of disordered communication on life styles are studied.
- 719. Seminar in Problems and Procedures in Evaluating Children. 3 hrs. The weaknesses and strengths of standardized tests are discussed.
- 722. Seminar in Pediatric Audiology. 3 hrs. Emphasizes behavioral and objective audiological evaluation of infants and young children.
- 723. Seminar in Electroacoustic Measurements in Hearing. 3 hrs. Administration and interpretation of electrophysiological auditory measurements.
- 724. Seminar in Industrial Hearing Conservation. 3 hrs. Presents effects of noise exposure on the auditory mechanism, measurement of noise, and legislation related to industrial hearing conservation.
- 726. Auditory Perceptual Disorders. 3 hrs. Theories and tests are studied.

- 727. **Seminar: Association Method.** 3 hrs. Prerequisite: permission. Evaluation, management plans and intervention techniques for language disordered children are presented.
- 730. Language Intervention with Infants. 3 hrs. Current research in infant language development and intervention are explored.
- 763. Laboratory in Speech Pathology. 1-3 hrs. Students conduct supervised laboratory research using instruments.
- 764. Laboratory in Language Disorders. 1-3 hrs. Specialized testing procedures are learned.
- 791. Research in Speech and Hearing Sciences. 1-16 hrs. Prerequisite: permission. Teaches advanced research procedures.
- 792. Special Problems. 3 hrs. Content varies.
- 797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 898. Dissertation, 12 hrs.

# SPEECH COMMUNICATION (SCM-216) See Course Listing Under COMMUNICATION.

# **TECHNICAL AND OCCUPATIONAL EDUCATION (TOE-165)**

- 500. Facility Planning and Equipment Selection. 3 hrs. A study of facility layout, equipment specifications, cost analysis and procurement procedures.
- 533. Curriculum Construction for Cooperative Education. 3 hrs. Objectives, content, and arrangement of units for teaching cooperative and evening classes.
- 541. **Philosophy and Principles of Vo Tech Instruction.** 3 hrs. A methods course for teaching trade, technical and other vocational subjects.
- 542. Management of the Vo Tech Learning Environment. 3 hrs. Organization and management of students, equipment, and physical facilities.
- 543. **Design of the Vo Tech Instructional Program.** 3 hrs. Occupational analysis based design and sequencing of instructional components and the development of appropriate support materials.
- 544. **Development of Vo Tech Instructional Materials.** 3 hrs. Selection, development and use of instructional aids, with an emphasis on media production.
- 545. **Delivery of the Vo Tech Instructional Program**. 3 hrs. Learning theory based techniques of instructional delivery in the vocational classroom and laboratory.
- 546. **Evaluation of Vo Tech Student Performance.** 3 hrs. Development and utilization of various measuring devices and techniques, statistical treatment of data, and grade assignments.
- 547. **Industrial Human Relations.** 3 hrs. A study of human behavior and interpersonal dynamics within the industrial organization and environment. Primarily for industrial educators.
- 548. **Industrial and Vocational Safety.** 3 hrs. Analysis of fundamentals of accident prevention and their application in school shops.
- 552. **History and Philosophy of Vocational Education.** 3 hrs. Objectives, principles, aims, and organization of programs in schools and colleges.
- 553. **Problems of the Coordinator.** 3 hrs. A study of the problems, procedures, techniques, etc., in the operation of part-time cooperative education.
- 565. Microcomputer Applications in Technical Education. 3 hrs. Skill development in the use of microcomputers and software appropriate to teaching and managing industrial, vocational, and technical education activities.
- 567. Desktop Publishing & Presentation Graphics. 3 hrs. Office-based microcomputer production of typeface/graphics enhanced media, designed to be both pleasing in appearance and effective in communication.
- 569. Computer Based Instructional Technology. 3 hrs. Interactive instructional design and applications. Introduction to hypermedia tools, authoring systems, CAI software reviews/evaluations, and hands-on interactive module production.

- 578. Specialized Studies in Developmental Disabilities. 1-6 hrs. Specialized study and skill acquisition in the area of developmental disabilities. Topics vary.
- 583. Occupational Safety. 3 hrs. Organization and administration of safety programs including implementation of the Occupational Safety and Health Act. Primarily for industrial educators.
- 597. Professional Collaboration for Developmental Disability Services. 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.
- 605. **History of Technology & Occupational Education.** 3 hrs. A study of leaders, movements, and agencies in the development of technical and occupational education.
- 607. Curriculum Design in Technology & Occupational Education. 3 hrs. A study of the design, development and utilization of various instructional strategies and materials.
- 611. Philosophy and Organization of Occupational Education. 3 hrs. Foundations and development of vocational education under national, state and local influence.
- 688. Medical Aspects of Developmental Disabilities. 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.
- 689. Seminar in Technology Education, I, II, III. 2 hrs. May be taken three times.
- 692. **Special Problems in Technical Education.** 1-3 hrs. Advanced individualized project relevant to the student's skill speciality.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 698. Thesis. 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.
- 701. Supervision of Vocational and Technical Education. 3 hrs. A study of the problems of local directors and supervisors of vocational and technical education.
- 702. **Individualized Instruction in Vocational Technical Education.** 3 hrs. Foundations, principles, and techniques of teaching knowledge and skills on an individual basis.
- 703. Contemporary Vocational and Technical Education Programs. 3 hrs. A comparative analysis of contemporary and emerging programs in vocational education.
- 704. **Vocational Guidance and Placement.** 3 hrs. An overview of careers available through vocational and technical education, methods of student identification placement, and follow-up.
- 794. Field Problem in Industrial and Vocational Education. 3 hrs. Prerequisites: REF 601, REF 702, and approval of the major professor.
- 798. **Specialist Thesis.** 6 hrs. Utilizing research and professional knowledge in the solution of a practical educational problem. Scholarly paper required.

# THEATRE (THE-689)

- 501. Costume Design. 3 hrs. Prerequisite: Permission of instructor. Costume design in theatrical production.
- 503. Advanced Movement/Combat. 2 hrs. Course in stage movement and dance as well as stylized movement and stage combat.
- 510. Stage Sound Engineering. 3 hrs. Principles and practice in stage sound engineering.
- 511. Advanced Voice for the Actor. 3 hrs. Diction, projection, and techniques for dealing with period language.
- 512. Stage Lighting. 3 hrs. Prerequisite: Permission of instructor. Theory and application of general and special lighting, color, instrumentation, and control.
- 514. Improvisation. 3 hrs. A performance course for actors, directors and teachers of drama, utilizing improvisation as a tool for instruction.
- 516. Intermediate Acting II. 3 hrs. Improvisation and advanced scene study including absurdist, classic, surrealist, and verse drama.
- 517. Period Acting Styles I. 3 hrs. Study of acting styles from ancient Greece through Shakespeare. Utilizing speech, movement, acting style, and masks.

- 518. Period Acting Styles II. 3 hrs. Study of styles of acting from restoration through 1900. Utilizing speech, movement, and acting style.
- 520. Advanced Directing. 3 hrs. Prerequisite: THE 320 or equivalent.
- 527. Survey of Theatre History. 3 hrs. A survey of the history of Western theatre.
- 528. Historic Theatre Production. 3 hrs. A survey of historic theatre production techniques.
- 530. Summer Theatre I. 3 hrs. Prerequisite: Permission of staff. Concentrated applied theatre.
- 531. Summer Theatre II. 3 hrs. Continuation of THE 530.
- 533. **Design Studio I.** 3 hrs. Rendering commonly used theatrical materials.
- 534. Design Studio II. 3 hrs. Scenographic techniques.
- 535. Advanced Scene Design. 3 hrs.
- 545. Advanced Stage Lighting. 3 hrs.
- 550. The Audition Process. 3 hrs. Prerequisite: Permission of instructor, audition or THE 416. Methods and techniques needed to audition and interview for the professional theatre.
- 551. The Rehearsal Process. 2 hrs. Prerequisite: Permission of instructor, audition, THE 416. Participation in the dissection and analysis of the rehearsal process from casting through performance.
- 560. Costume Design Studio. 3 hrs. Projects in designing costumes for plays, opera, and dance. Emphasis placed on costume designs as an element in a total production concept.
- 561. Advanced Theatrical Makeup. 3 hrs. Projects in makeup design and execution. Emphasis placed on three-dimensional makeup techniques for theatre, television, and film.
- 571. **Performance and Production Internship.** 1-9 hrs. Professional experience in student's area of emphasis received while in residence with an approved professional organization.
- 581. **Repertory Theatre.** 3-9 hrs. Participation in the analysis and preparation of the performances of four plays in repertory. Daily and nightly involvement (approximately ten hours per day) in theatre workshops (voice, movement, or technical theatre) and in rehearsals for the plays. (Must enroll in three 3-hour sections.)
- 597. Theatre Exchange Studies Abroad. 9-15 hrs. Opportunity to study theatre for one semester in an approved exchange program abroad. Offered under auspices of Center of International Education.
- 599. British Studies in Theatre. 3-6 hrs.
- 601. Script Analysis. 2 hrs. A course in script analysis for actors, directors, and designers.
- 606. **Dramatic and Performance Theory.** 3 hrs. A survey of the theoretical relationships of dramatic literature and criticism to the creative process.
- 611. **Seminar: Contemporary Trends in Theatre.** 3 hrs. An in-depth examination of a specific post-modern dramatist, a complete canon as a reflection of the drama in modern society.
- 612. Seminar in Theatre Production. 3 hrs. A seminar in the integration of research skills into the creative process. Research will encompass historical, critical, biographical, and anthropological fields. The course is designed to include all MFA disciplines.
- 613. Seminar in Theatre Design and Structure. 3 hrs. Research in architectural and acoustical design, lighting, audience arrangement, decor, function, and stage requirements.
- 614. Seminar in Acting and Directing. 3 hrs. An in-depth study of the relationship of the creative processes generated by the actor and the director to methods of production.
- 626. **Scenic Design.** 3 hrs. Elements of scene design. Play analysis in terms of visualization and style and the mechanics of developing an effective stage setting.
- 679-L. Practicum in Box Office and Publicity. 1-3 hrs. May be taken for a total of nine (9) hours.
- 681-L. Practicum in Acting and Directing. 1-3 hrs. May be taken for a total of nine (9) hours.
- 682-L. Practicum in Costume and Makeup. 1-3 hrs. May be taken for a total of nine (9) hours.
- 683-L. **Practicum in Scene Design and Technical Theatre.** 1-3 hrs. May be taken for a total of nine (9) hours.
- 684-L. Practicum in Lighting and Sound Engineering. 1-3 hrs. May be taken for a total of nine (9) hours.
- 685-L. Practicum in Reader's Theatre and Oral Interpretation. 1-3 hrs. May be taken for a total of nine (9) hours.

- 686-L. Practicum in Creative Dramatics and Children's Theatre. 1-3 hrs. May be taken for a total of nine (9) hours.
- 687-L. Practicum in Dance and Movement. 1-3 hrs. May be taken for a total of nine (9) hours.
- 691. Research in Theatre. 1-16 hrs. A written prospectus and timetable must be submitted and approved by a graduate faculty member before enrolling.
- 692. Special Problems I, II, III. 1-3 hrs. each. Investigation into specialized area of interest in the MFA student's discipline. Proposals with timetable must be submitted and approved by a graduate faculty member before enrolling.
- 696. **Practicum in Theatre I, II, III.** 3 hrs. each. Students participate in the University Theatre production process in a significant area of responsibility. THE 696 may be taken three times for a total of nine hours. THE 696 may be taken three times for a total of nine hours.
- 697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
- 699. Creative Project. 1-8 hrs.

### THERAPY (THY-740)

- 511. Introduction to Kinesiotherapy. 3 hrs. An introduction to the theory of organizing and conducting kinesiotherapy as it applies to physical and mental rehabilitation.
- 512. Kinesiotherapy I. 3 hrs. Prerequisites: BSC 250 and 251; HPR 303, 370, and 374; THY 511. Emphasis placed on physical evaluation procedures of spine and extremities, musculoskeletal function, goniometry and gait analysis.
- 513. Kinesiotherapy II. 3 hrs. Prerequisites: HPR 308; THY 512 and 551. Rehabilitation as a part of the comprehensive medical core and its application in restoration of physical and mental impairments toward functional independence.
- 521. Clinical Experience. 1-4 hrs. Arr. A supervised internship in various habilitation, rehabilitation or neuropsychiatric clinics. May be repeated.
- 551. Neurological and Pathological Foundations in Kinesiotherapy, 3 hrs. The introductory study of neuro sciences and pathology of diseases commonly encountered by kinesiotherapists.
- 561. Kinesiotherapy and Rehabilitation Medicine. 2 hrs. An introduction to the basic concepts and considerations necessary for effective functioning in the clinical setting.
- 562. Spinal Cord Injuries and Muscle Disorders. 2 hrs. A review of normal and abnormal functioning of the motor pathways with emphasis on evaluation and rehabilitation of specific motor disorders and spinal cord injuries.
- 563. **Normal Human Locomotion.** 2 hrs. An indepth analysis of normal human locomotion and its impact on ambulation training, prosthesis gait deviations and blind mobility training.
- 564. Cardiovascular and Respiratory Disorders. 2 hrs. A review of normal and abnormal functioning and rehabilitation programs for cardiovascular and respiratory disorders.
- 571. Accelerated Kinesiotherapy Rehabilitation Ward Program. 2 hrs. An introduction to the basic concepts and treatment procedures used in accelerated rehabilitation ward programs.
- 572. **Dynamics of Psychiatric Group Rehabilitation Programs.** 2 hrs. The complexities in directing neuropsychiatric group activities.
- 573. Neuro-Psychiatric Geriatric Training. 2 hrs. An introduction to the multi-problem areas of communication with motivating and treating the geriatric, neuropsychiatric patient.
- 574. **Programs for the Severely Disturbed Psychiatric Patient.** 2 hrs. An introduction to the problems of treating the psychiatric patient in a locked ward setting.
- 578. **Specialized Studies in Developmental Disabilities.** 1-6 hrs. Specialized study and skill acquisition in the area of developmental disabilities. Topics vary.
- 597. Professional Collaboration for Developmental Disability Services. 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.

- 598. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.
- 678. Assessment and Intervention for Handicapped Children 0-5. 3 hrs. Current issues and theories regarding assessment and intervention procedures for at-risk and handicapped young children, birth through 5.
- 688. Medical Aspects of Developmental Disabilities. 3 hrs. Medical conditions, diagnostic tests, and other health care issues relevant to individuals with developmental disabilities.

### **TOXICOLOGY (TOX-385)**

570. Toxicology. 3 hrs.

# ASSOCIATE\* AND REGULAR GRADUATE FACULTY

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'Leave of absence, Spring Semester \*Associate Graduate Faculty

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